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Agricultural.

MR. ARMOUR AS A PHILANTHROPIST.

His Idea Regarding the Present Condition of the Cattle Market.

Mr Phil. D. Armour, the most famous or notorious of the "big four," appeared before the Senate committee on commerce, last week, to give evidence as to the present condition of the cattle business, and the causes which have led up to it. What he said is very interesting to the producer of cattle, but it will probably bring a smile to the face of the farmer when he reads the statement that if the dressed beef business was not carried on there would not be any market for cattle. The "big four," therefore, are only acting as philanthropists in running the business, like the Israelite who sold clothing "shust to blease the bublic—and made noddings." Here is part of what Phil said:

The depression in prices and the present state of the cattle markets are due to the overproduction, especially of grass-fed cattle; the marketing of immature animals which are too thin for block; this has affected all corn-fed and native cattle except the choicest, and enforced competition of farmers raising cattle on the higher priced and highly improved farms of Illinois, Iowa, Missouri, Kansas, and Nebraska with the ranches of the West and Southwest, who herd thousands of this character of inferior cattle upon public lands, or lands of little value. The gradual absorption of the ranges by actual settlers and overproduction of range cattle has greatly overcrowded the remaining range country, and has consequently lessened the quantity of grass and impaired its nutritive quality. As a natural result, grass-fed range cattle have deteriorated in weight and value and the Southwestern steers are now coming in weighing from 10 to 20 per cent less than the steers of a similar character did six years ago.

He maintained that hides had declined from $1.25 to $1 and 60 cents because of the importation of foreign hides, which amounted to over 4,000,000 hides per year. That cattle men, through the oleomargarine tax, had lost $1,000,000 a year, and that the reduction in the price of canned meats is due to the competition of those products with cheap South American and Australian beef and mutton of fully 50 per cent. He also showed by statistics that South American and Australian meat products have become formidable rivals of the United States in European markets, and claimed that unwise agitation by Congress and the States in reference to the healthfulness of American cattle and the products of cattle had been injurious. He also showed a very material reduction in the prices obtainable for canned meats and all sorts of pickled meats, and that the depreciation of all these different products had reduced the value of range cattle over $10 to $12 per head. He showed that the changed condition of cattle had compelled the establishing of centralized markets, as they are called, without which the regular raisers could not dispose of cattle, nor could the export trade in dressed, salted, or preserved meats be carried on. He showed that such markets are the effect of the present condition of cattle growing and marketing and not the cause.

Mr. Armour also contended that the price of coarse meats, such as rounds, shoulders, etc., had been considerably reduced to the consumer, but that the ribs, the loins, and the more desirable portions had not been reduced so much because of the great demand for them and because they formed such a small proportion of the carcass. The dressed beef industry has proven beneficial to cattlemen and beef consumers alike, for without it it is safe to say that cattle would bring a price sometimes not more than the freight. The dressed beef business is so concentrated and is conducted upon a scale of such magnitude that dressed beef men can profitably utilize the offal and otherwise waste products of slaughtered animals which are absolutely useless to smaller slaughterers. The cattle men of the United States are indebted to the dressed beef industry not only for the advanced methods adopted for utilizing offal and waste, but also for successful efforts of its promoters in opening up new markets in communities which were not formerly beef-consuming. By careful attention we have succeeded in placing dressed beef in the European markets in first-class condition, and as a result the export trade in dressed beef has increased from 83,560,874 pounds in 1887 to 160,000,000 pounds in the past twelve months. Mr. Armour denied that he or his firm had any combination or agreement of any kind with any other party or parties to fix or control the prices which should be paid for live cattle; that either he nor his firm had ever arranged with others in the dressed beef business, or with shippers of beef in the carcass, to fix the prices at which such carcasses should be sold. He did admit, however, the prices of cut meats and canned meats were arranged from time to time with other producers of those commodities, according to the conditions of the market, as the supply and demand required, as was absolutely necessary to protect the dealers in this article from sudden and violent declines in prices.

NEW YORK MERINO SHEEP-BREEDERS' ASSOCIATION.

Annual Meeting of the Association—Fair Attendance and Renewed Interest Shown—Routine Business, Papers and Discussions.

When President Davis Cossitt called the members of the N. Y. Merino Sheep Breeders' Association to order on Tuesday last, in one of the parlors of the Whitcomb House, Rochester, there was not only a goodly number of breeders present, but they were largely men who have acquired national reputations as breeders of the Merino, even though some of them are yet young in years.

President Cossitt had just returned a few days previously from the national convention of wool-growers in Washington, and in his annual address, which we publish in full, gives some interesting notes regarding the situation in Washington, and the position taken by the wool-growers and the manufacturers:

In response to a call issued by the President of the National Wool Growers' Association and by direction of our Executive Committee (for I did not choose to be a self-appointed delegate), I attended the meeting of wool growers held last week at Washington.

There was quite a respectable gathering of delegates from the wool-producing States and Territories, and measures were adopted to secure, if possible, a recognition by Congress of our just claims and such legislation on the wool tariff as we have a right to expect.

At the last Presidential election, which occurred only a year ago, the most important issue at stake was the principle of protection to American industries, and the Chicago platform contained the sound all wool plank that the "wool-grower should receive full and adequate protection." After the most thorough and exhaustive discussion ever had upon the subject the people pronounced in favor of that principle.

On the assembling of Congress last winter, some of our representatives endeavored to secure the adoption of measures to meet the requirements of the people thus expressed at the ballot-box.

Among the industries most viciously assailed by the enemies of protection was that of sheep husbandry.

The revenue laws applicable to this branch of business were so loosely drawn and so unfairly administered that the principle of protection had become, in a great measure, nugatory.

The Senate bill already introduced was framed in the interest and at the dictation of the woolen and carpet manufacturers, and in direct opposition to the interests of the American wool-producers.

To meet this combination of the foreign wool-growers and the American manufacturers, Mr. Allison, of Iowa, offered several amendments to the Senate bill, which were finally adopted by the Senate.

This bill as amended, though not up to our requirements or our necessities, we may decide to accept, provided we can get nothing better, but we are now confronted with the prospect that these amendments are to meet with determined opposition by the combined interests of foreign wool producers and of some, not all, of the woolen and carpet manufacturers. What measure of protection does this bill, even as amended, afford us? By its provisions foreign wools of the first class shall pay 12, 24 and 36 cents on unwashed, washed and scoured wools respectively.

The competing wools in this class come mainly from New Zealand, Australia and the Argentine Republic.

At shearing these wools are all sorted and the fleeces "skirted," the heavier and coarser portions—the breech, belly and leg wool, comprising fully one third of the weight, is separated from the body of the fleece which is, after this operation, though unwashed, lighter than our ordinary washed fleece, and as every pound of it is equivalent to two pounds of our unwashed, it in reality will only pay six instead of 12 cents duty.

In the combing class washed and unwashed are to pay the same rate of duty, and we may be quite sure that they will be washed to very near the scoured point, so that every pound will represent at least two and one-half pounds or domestic fleece, and our wools of this class will only be protected by a four to six cent duty.

The crowning iniquity of the whole business is found under the head of "Carpet Wools;" here the carpet weavers display their genius.

This bill declares that "all wool of Merino blood, immediate or remote, shall be classed as clothing," and then specifies Donskoi as carpet wool, and carpet wool it must be until past our custom houses.

According to the report of the American Consul at Odessa, whence the great bulk of Russian wool is exported, the Donskoi wools have been so improved by the admixtures of Merino and English blood, that it is fully equal and as well adapted to the manufacture of clothing as Texas or Territorial wools, and is used almost exclusively for this purpose; moreover, this wool is all thoroughly scoured and should pay the scoured clothing wool duty of 36 cents (30 cents under the present law) instead of the carpet wool duty of five cents as is now and has heretofore been practiced.

During the past year this country imported 90,000,000 lbs. of so-called carpet wool; in addition we produced 20,000,000 lbs., altogether 110,000,000 lbs. Now, what becomes of this immense quantity?

The argument used by the carpet men is a very plausible one. There being so many pounds of carpets and blankets made, of course there must be an equal number of pounds of wool used. By analyzing a large number of samples of carpeting it has been discovered that they are not quite all wool. Three ply ingrain carpeting, weighing 30 oz. to the square yard, was found to contain only 14 oz. of wool, some of light weight had only from six to ten oz.—just sufficient to swear by—the rest being made up of jute, cows' hair and ground rags.

About the same proportion of wool is used in the manufacture of blankets; in fact, no goods of this kind are now made in the United States entirely from new wool, all the cheaper grades containing from 25 to 75 per cent of something besides sound wool. So it is a safe estimate that at least 70 per cent of so-called carpet wool is used for clothing purposes.

While in Washington a committee was appointed to lay the subject of wool wastes before the Secretary of the Treasury. Eight million lbs. of ring waste has been imported within the year. We procured samples of this article, which is so purified beyond the scoured point that 100 lbs. of it makes 100 lbs of yarn, selling at 64 cts. and paying a duty of only ten cts., while samples of ordinary scoured wool selling at 55 cts. paid a duty of 30 cts.

The American Congress never intentionally imposed a duty of 30 cts. on a lot of scoured wool and admitted a superior stock at a less rate.

This 8,000,000 lbs. of ring waste is equivalent to not less than 25,000,000 lbs. of our unwashed Merino—more than is grown in any one of our largest wool-producing States, exceeding the entire clip of Ohio or Texas—twice as large as that of New York or Pennsylvania; and unless there is a different interpretation of the law very soon all foreign wool will be scoured and imported as waste at a duty of 10 cts., which means a protection of our product of about three to three and a half cents. Now, what remedy have we for this abuse?

Understanding as we do that the justness of our claims will have little weight with the average politician, let us examine for a moment the political bearing of the case; and your average politician is quite regardful of his future political state—he believes in the doctrine of "election."

Take, for instance, our own State of New York, this land of free beer, of Brother Burchard and the boodler, where a few votes—less than one half of those controlled by the wool-growers within its borders—if cast in one direction might change the result in a close election. Protection never can succeed in Ohio, in Michigan, in West Virginia, in Iowa, Montana or California without the votes of the wool-growers. Already there is a strong and growing feeling among farmers against manufacturing trusts, and if "these gentlemen of the mill" insist upon this unjust discrimination in their favor as against the wool producers, they alone must be responsible for consequences, for we will insist upon free goods or the "full and equitable protection" promised us.

Secretary J. H. Earll read the minutes of the last meeting, which included his annual report. He said the second volume of the N. Y. State Register would be ready for distribution at the annual shearing.

Treasurer W. H. Sherman read his annual report, which showed a balance on hand of $597.86.

The President's address was then discussed, especially that part in which reference was made to proposed tariff legislation. Messrs. H. C. Smith, Dana, and Johnson, with Mr. Hunt, a well known woolen manufacturer of Honeoye Falls, took part in the discussion. The suggestions of President Cossitt were generally sound. Mr. Hunt, however, thought they did not go far enough, as no suggestion was made as to how the surplus in the treasury could be disposed of. He favored the abrogation of all internal revenue taxes on tobacco, oleomargarine and spirits used in the arts. These taxes were not needed, and the method of collecting them rendered them objectionable.

At the close of the discussion the President's address was ordered printed.

At the afternoon session an amendment to the constitution was adopted, ruling out of the Register of the Association all ewes which had been bred to rams of other breeds.

The election of officers for the ensuing year followed, and resulted in the re-election of a majority of those now serving.

President—Davis Cossitt, Onondaga.
Vice-President—J. S. Beecher, Livonia.
Secretary and Treasurer—J. Horatio Earll, Skaneateles.
Board of Directors—Peter Martin, George S. Hickox, and S. B. Lusk.
Pedigree Committee—C. W. Lewis, C. Collins, and E. I. Gage.

Mr. W. H. Sherman, the Treasurer, declining to accept the office for the coming year, it was finally decided to unite the office with that of Secretary, and Mr. Earll will perform the duties of both.

On motion, it was resolved to appoint a committee to confer with the various agricultural societies regarding the premiums awarded at their fairs, in the Merino classes, and the appointment of competent judges.

A committee was appointed by the President, Mr. Hunt as chairman, to prepare a series of resolutions expressive of the position the Association held on the question of tariff revision.

The President then announced that a paper would be read by R. Gibbons, of the MICHIGAN FARMER, entitled "The American Merino for To-day." It is given in full by request:

Mr President, and Members of the New York State Sheep Breeders' Association.—Gentlemen:—It is with a great deal of misgiving that I, a mere novice in all that pertains to the breeding of sheep, should present to the veteran breeders of this Association an opinion regarding the style and make-up of the Merino demanded by the conditions of to-day.

But I am here to learn—a student in what I regard as one of the most important of the great industries of our country. The more I have observed and studied it the more I have become impressed with the importance of the sheep industry to American agriculture; and the question, therefore, of what the American Merino of to-day should be is an absorbing one, as it is the most widely distributed of all the great breeds, and must, from the nature of things, continue to be, so long as wool-growing is followed as a business. Especially to you, gentlemen, who have, in many instances, spent nearly a life-time in studying this problem, is the question one of great interest.

Should the American Merino of to-day differ from those of former years? Of course it should, for more is expected of it, and it is subjected to a stronger and more exacting competition than ever before. It has to meet the mutton breeds of Great Britain in earnest rivalry on the cultivated farms of the older States; and its fleece, when it reaches the eastern markets, comes into competition with those shorn from the great flocks of Australia and South America, where breeders are also earnestly at work to improve their flocks in that direction which they deem most important in adding to their value. Therefore it is not too much to say that the breeder of the American Merino to-day has a more difficult problem to solve, would he keep his favorites in the lead of all other breeds in numbers and importance, than ever before.

To aid him in his struggle he has two important points of advantage over the breeders of an earlier day. These are, first, the improvements they made, and which have descended to him as a heritage with the first Merinos he purchased. Second, the history of the breed and its improvement from the day it first landed on our shores—a stranger in a strange land. That history is a beacon light to all breeders who study it, warning them of the sunken rocks and whirlpools which beset their pathway, and which have proved fatal to the hopes and ambitions of so many.

I fully appreciate the fact that to-day there is a popular demand for a Merino of a different type from that sought for a few years ago. But this demand does not come from the veterans in the business, but rather from the younger recruits, who have not had the opportunity of testing the stability of ever changing popular sentiment, or know how very frequently it is founded upon a fallacy. According to popular opinion the Merino for to-day is a sheep with a large, smooth carcass, with a longer staple, and the round shoulder, round barrel and straight hind-quarter of the mutton breeds—a bastard Shropshire or Southdown. They can be bred, gentlemen, and very easily; but when you get them they are not American Merinos, and will be found lacking in some of the most essential qualities which have made the American Merino famous.

In some parts of Pennsylvania and Ohio such Merinos are bred under the name of Delaine, Black-Top, Dickinson, etc. I had an opportunity of examining a few of them at the Exposition held in Detroit this fall. I was anxious to see them, for I thought, from the highly colored reports of their good qualities, and the handsome illustrations published in the advertising columns of some of the agricultural papers, that the breeders of these families of the Merino had something which our flocks in Michigan, as well as in your own State and Vermont, could not compete with. I was more than pleased with them—pleased that some other breeders beside those in Michigan owned them. To paraphrase an opinion of President Lincoln, "for the class of people who like that sort of thing, they are just the thing that class of people will like"—and I must admit I do not belong to that class. They were such an utter failure in everything which in my opinion goes to make up a good Merino that I could not help feeling that our breeders were entirely safe from such competition. Such sheep in flocks in Michigan, and I presume in your own State, go to the butcher. These much lauded Merinos had a few pounds of good wool on their bodies—the upper part of them—of longer staple than the average Merino fleece, of good quality, with good crimp, and coarser than the Merino usually grows, but their bare bellies, heads and legs, and the lack of density in the entire fleece, satisfied me that the agricultural papers in describing them, and the artists in sketching them, drew largely upon their imagination for their facts. They certainly have not given correct descriptions of the originals. The great weight of carcass I expected to see appeared to have had the same reason for being claimed by their owners as the big fleeces. They are simply nondescripts—a Merino with just enough of the shape of the mutton breeds to spoil it for either. The owners never thought of showing their under side; and I was informed by the editor of a popular stock journal published at Pittsburgh, that the breeders of these mutton Merinos cared nothing about how the belly, head or legs were covered, as the wool grown upon these parts was of little value. Also that their whole fleeces graded as delaine, and sold without dockage. It would be a good ram, I imagine, which would give a ten pound fleece. In the pens near them were Michigan sheep whose fleeces contained about as much delaine as theirs did, and had the belly, neck, flank and leg wool besides—about as much more. That, decidedly, is not the Merino for to-day.

Upon the other hand I believe that many of our Merinos have been bred with too many wrinkles, too much oil, and too small in carcass. Their legs are too short, and bone too fine, and they are entirely unsuited to meet the requirements of the average wool-grower. When rams of this stamp are turned into a flock they are always a disappointment. We must have more leg and stronger under the rams so that they can work without help. We do not want too many wrinkles on the body, especially on the ewe, for it detracts from her breeding qualities, makes her fleece too oily, weakens her constitution, makes her a hard keeper, and nearly invariably a poor mother. Such ewes are always to be seen at our fairs, small, with extremely heavy fleeces, and being in good condition, look very attractive. To the young man just beginning as a breeder they offer a great temptation; but he should leave them alone, for they will surely disappoint him. These certainly are not the Merinos for to-day.

These are two of the types of the Merino which are being bred to-day, and my observation among the flocks of Michigan convinced me that either of them, if persistently bred for, will certainly end in failure on the part of the breeder—followed by disgust with the Merino sheep collectively—while the breeder, and not the sheep, was to blame.

Well, then, if neither of these two types are what is wanted in the Merino for to-day, the question naturally comes up, what is the type required? With your permission, gentlemen, I will endeavor to sketch the portrait of the class of sheep which to my mind would best meet present conditions and requirements. First let us begin with the ram, because he is the most important—in fact, so far as the increase is concerned, standing for half the flock.

To see him as he is, follow me to his pen, and there discuss and criticise his make-up. As we approach him he meets us with a bold look—not a trace of fear apparent. His short, broad head shows both brains and power, and the wool caps it and extends to and nearly covers the small ears, placed far apart, thick and velvety to the touch, and yet instinct with life. His eye is bold and clear, the wool extending below it on the face, where it meets the wrinkles which cross the nose, covered with soft hair free from harshness and bristles. The horns, thick at the base, widely separated to allow room for the broad head—the markings on them fine and regular. The head is set upon a short deep neck, thick through, with heavy folds, and perhaps along the tops of these folds are considerable *jarre* hairs, which give a look of vigor and individuality, and promise of a strong constitution. The folds extend down below the brisket, and below them is seen two big boned, straight, strong legs, well covered with wool, placed wide apart to give ample room for lung power—the engine which moves the machine and gauges its force. The neck I consider one of the most important of all the points in the make-up of a ram. If deep and broad it means power, will, vigor and constitution. A thin-necked ram, even if he is good in other points, is an abomination, and should be used at an early age to furnish mutton. The shoulder is prominent like that of a thoroughbred horse, without a sudden droop before or behind it, but curving slightly downward to meet the backbone. The rib should not be sprung so as to give a round, or barrel shape to the body; but slightly flat at top, gradually widening, and considerably broader below than above—like an egg, for instance, with its small end uppermost—an ellipsis, with the top points touching and the bottom ones separated. This is the only conformation which can exist in connection with the prominent shoulder. It is the chest for an animal to have which is active in its habits and has a vigorous constitution. It gives greater girth back of the shoulder than the round rib, for then the rib is shortened. It is the conformation of chest which gives the greatest lung power, and enables the thoroughbred horse to stand the immense strain of a four mile race without injury, and to repeat it if necessary. I am thus particular in speaking of the front of the ram because it contains the vital organs, and determines its constitutional vigor and vitality. If defective in these respects, no matter how near to perfection it may be in all others, it will be a disappointment. The back is short, closely coupled, the shoulders laying well back, and the hindquarters coming well forward to meet it, giving a short back, rising slightly at the coupling, giving a strong loin, and at the same time a good length of body, as a consequence of the sloping shoulder and long hindquarter. The hindquarter should extend as straight as possible to a broad tail—but a slight droop from the coupling to the tail, while not so pleasing, is not a sign of weakness, as the drooping rump is the form of the trotting horse, the pacer, and the Percheron, and neither one of them is deficient in propelling power. The hind leg should be fairly straight, not too much so, for that gives the round bone of the mutton sheep, while that of the Merino should be flatter, with the hock more strongly defined. You can only get the straight hind leg which so many breed for at the expense of other and more valuable characteristics. It comes with a round shoulder and rib, and nearly always with a rather dry fleece, lacking density. The hips should be broad, filled in well between coupling and tail, and with large folds coming well down on the leg, and forming a deep flank. Now, then, turn him over, and see how he is on the under side. It is now seen that he is longer-bodied than he appeared while standing up; his fleece covers the entire surface—into the arm-pits and around the hind legs; his large bag is well covered also. Large wrinkles extend across the belly, and lose themselves on the sides, with a couple of large ones running at right angles with them along the center of the belly for a short distance—giving density to his fleece. Now, stand him up and look at his wool. It is a ram's fleece. Oil a light buff, and evenly distributed, showing that it comes from a healthy body. Fleece very dense, not less than two nor more than two and a half inches in length at a year's growth, and showing a fine crimp its entire length. He stands up square on his legs, which have plenty of bone and are of good length, his hoofs are worn square with exercise on the sidehills or gravel covered yards, and he has a carcass in full fleece, at three years old, of from 160 to 175 lbs. As we leave his pen he looks after us with his head erect, and as self-possessed and proud as a game-cock, well knowing that he is a favorite. That, gentlemen, is my opinion of the Merino ram for to-day. How does he suit you?

THE EWE.

Good animals, like good men, always have good mothers. Their valuable characteristics may not be apparent to the ordinary observer, but they exist all the same. In many respects the ewe should differ from the ram. She should be as feminine in character as he is masculine. If too masculine she will never prove valuable in the flock, except perhaps as a show sheep. Looking at her from the front we should see a broad head, well capped, small ears, face narrower than that of the ram, the nose wrinkled, soft and velvety, the eye large and with a contented look, showing that she is free from nervousness and not easily frightened, the neck longer and thinner than in the ram, if we want a good milker which will raise her lamb well. Her neck folds are not so large as those of the ram, and nearly, if not entirely, free from *jarre* hairs. She should have the same conformation of body as the ram—deep, not round, with the body widening behind. The neck, while longer and thinner than the ram's, should be muscular and not show any weakness. The loin must be strong to stand the labor of maternity, and for that reason the back must not be too long, or show a tendency to droop before reaching the coupling. She should look larger behind than in front, and the abdomen must be deep and roomy. She should stand up square, have plenty of bone in her limbs, as fineness or lack of bone means a weak constitution—and that is the first and last of all things to guard against in stock-breeding. Without a sound constitution everything else is valueless. She should have broad hips, a broad tail, with good hip folds and a deep flank. Her belly should be well covered with wool, and have sufficient wrinkles to insure density. Her legs should also be well covered with wool naturally, although as she ages, and if a regular breeder, they will probably become somewhat bare. If there are no wrinkles on her body from shoulder to hip, except those on her belly, so much the better. Her fleece should be longer in staple than that of the ram, oil lighter in color and less of it. The quality of fleece should be of the highest type—fine, silky, beautifully crimped, and as even as possible over the whole body. The staple from 2½ to three inches in length. She should have, when suckling a lamb, a large udder, with prominent teats, and give milk enough to nourish and bring forward her offspring, her food going to milk rather than flesh, and should gain rapidly when her lamb is taken off. Such a ewe, in full fleece, and in matured form, should weigh from 115 to 130 lbs.

This is the style of ewe I would breed to the ram described, and from them I would expect to breed the Merino for to-day—a sheep good enough to compete with any or all breeds combined. I have no pride of opinion as to what constitutes the best type of Merino for to-day, and submit my ideas with the hope that in any discussion which follows I may learn from the veteran breeders around me wherein the type of sheep described could be modified or changed with advantage to the breed, for that, after all, is the point to reach for—the continued improvement of the American Merino.

President Cossitt said the discussion of the paper was in order.

Mr. J. S. Beecher said there was one point in which he disagreed with the paper. Did not think it possible to grow the length of fleece stated without losing density. Favored a staple on the ewe from two to 2½ inches.

Mr. Johnson said that looking at the question as a wool grower the type of sheep described in the paper suited him. As to the density, he thought it was the rule for flocks with good length of staple to shear the best, and certainly they grew better wool.

Mr. H. R. Dewey, of Michigan, thought the description of the ewe faulty. Wanted more wrinkles than the one described in the paper. The length of staple was also too great.

Mr. H. C. Smith objected to the sharp shoulder. He thought that had been discarded some time ago, and he could not see why the flat rib and sharp shoulder, rather than the round barrel and shoulder, should be again bred for.

Mr. Lewis thought the sheep described would be a good class to have, and certainly would be of strong constitution.

Mr. Lusk thought the paper had the men very nearly right.

Mr. Hunt said the length of the fleece did not make much difference. For flannels manufacturers wanted a long staple, but for broadcloth, where the soft effect was produced by the number of ends left loose, the shorter the staple the better. The manufacturer wanted different lengths of staple as well as wools differing in other respects.

Mr. D. P. Dewey, of Grand Blanc, Mich., read a paper entitled "The Value of Pedigree," which, with the discussion, will be given hereafter. It met with general favor from the breeders present.

Mr. Hunt, from the committee for that purpose, reported the following:

WHEREAS, The present administration is pledged to reduce the surplus revenues of the government; and, whereas, the present internal revenue collections are practically equal to the excess of revenue collected by the government; and, whereas, any and all changes in tariff or revenue collection laws should be enacted with a view to the least possible disturbance to business interests; it is, therefore,

Resolved, That we note with pleasure the recommendations of President Harrison in his late message to Congress, for the repeal of the tax on tobacco and the spirits used in the arts.

Resolved, That inasmuch as the taxes mentioned yield but one-half of the surplus, as reported by the Secretary of the Treasury, we demand that Congress shall repeal all internal revenue collection laws, to the end that there shall remain no further necessity or opportunity for tariff reduction.

The report was unanimously adopted.

The following resolutions, prepared by Secretary Earll, were also adopted:

WHEREAS, An all-wise Providence has seen fit to remove by death from our midst, J. J. Brainard, James T. Morse and Marcus Lusk, it seems proper that we should place upon our records some testimonials for their loss and tribute to their worth; therefore be it

Resolved, That in the death of our late members, we have lost some of our influential members who were respected by those who knew them for sincerity and integrity; their death causes deep sorrow to all who knew them.

Resolved, That our sympathies are hereby extended to the families and friends of the deceased; and that a copy of the above preamble and resolutions be forwarded to their friends, and placed upon the records of this Association.

On motion it was resolved to hold a shearing next spring, the time and place to be decided upon by the Executive Committee.

A vote of thanks was extended to the Michigan men for their attendance, and the Association adjourned.

INFORMATION WANTED.

To the Editor of the Michigan Farmer.

I have some questions I would like to have answered in the FARMER.

Are the ashes from coal such as is used in steam engines of any value as a fertilizer for young apple trees? If they are, how much can I afford to pay a wagon load for them and haul them one mile and a half?

Are there any breeders of what are called Black Top Merino sheep in this State (Michigan)?

Is corn and cob meal good feed for sheep?

An answer to the above would oblige an old subscriber very much. W. C. W.

We do not believe there are any what are technically known as Black Top Merinos bred in Michigan. Mr. Lot Bonine, of Vandalia, Cass Co., has a flock that resemble them in some respects, but are generally superior as wool-growers.

Corn and cob meal is not safe to feed sheep because of the sharp pieces of cob which get into the stomach. The stomach of the sheep is very tender, and they often die from pieces of the heads of timothy getting into that organ. It is different with hogs.

As to coal ashes, they may be of some value in compacting sandy soils, or acting as a mulch around apple trees, but we doubt if they are of much value as a fertilizer. Perhaps some of our readers have had some experience with them, and can answer our correspondent from a practical standpoint.

Experience With Poland-Chinas.

CHESTER, Dec. 2, 1889.

To the Editor of the Michigan Farmer.

About a year ago I purchased a full blood Poland-China boar pig of the Agricultural Farm, and a sow of the well-known breeders, L. W. and O. Barnes. I now have a litter of pigs, farrowed August 1st last, that I think are fine specimens of the breed, considering the chance they have had. One of them weighed, Nov. 30th, 102 lbs.; the rest run from 80 to 100 lbs. They have had no extra care and have had to take their chances with the rest of my hogs. Now, as I am a beginner at the business, I would like to ask some breeder or person who is acquainted with this breed, if this is up to the average.

Yours respectfully,
A. L. STAFFORD.

The weights are a good average, not extra for the breed; but under the conditions they have been grown this is a very good showing, as they evidently have not been forced.

For the Michigan Farmer.

HOW SHALL WE DISTRIBUTE FARM MANURES?

There seem to be so many advocates of top-dressing our fields in winter, that I am often astonished that farmers do not fall more into line and make the application. Probably many have done so; but which one has compared the results of earlier applications and later ones?

If they have they (like myself), have failed to give the public the benefit of those results.

A number of years ago I wished to top-dress a meadow. Some parts were quite washy, being on a hillside; some were low and held the water on the surface till the frost was out.

1. My first plot (about two acres each) was spread on evenly about September 1st; part was on hillside, part on the level.

2. October 1st another plot was manured.

3. October 15 another was treated in like manner. This was with manure about half rotted. I also drew out fresh made manure at the latter date and covered about an acre.

4. On December 15, I also dressed an acre each with the old and the new made manure.

5. Some time in January I finished the field, about half an acre, completed with the old manure, and about four acres of new.

Now as to results:

First, plots one and two gave about two tons per acre of choice long hay.

Second, plot three, that had the old manure applied, gave about one and three-quarters tons. The fresh manure about one and a half tons.

Third, plot four, realized one and a quarter tons per acre—very fine bottomed.

Fourth, plot five gave scarcely one ton per acre, very fine and short hay. The new made manure had not rotted; but was a nuisance. It raked up with the hay and could not be totally separated, which made what hay there was only of third quality.

This one experiment decided my future applications of top-dressing to meadows. I have several times since applied manure at different seasons on meadows because I could not get it on in September and October, and found the results were nearly the same as with the first experiment, and whatever difference accrued in harvest I believe resulted from the qualities in the manure.

My conclusions are that after the ground becomes frozen in the fall it is not only useless to manure for meadows, but with fresh made material is a nuisance, and so much labor lost. The manure should be rotted and spread from the wagon evenly over the land not later than October 15, so that the warm rains can wash the substance of plant food in the soil where the rootlets can sap it up before the cold winding sheet of snow and ice buries them to rest.

The animal takes into its system during the day, or while it is moving around, from the food it has eaten, and during sleep the nutriments that were taken into the blood are distributed into the muscles, recuperating them, and getting them ready for action when life again comes into action. Likewise do all our biennial and herbaceous plants resemble the living animal. Whatever is taken into the system before sleep so much strengthens it during the heat and burden of a long day's labor. For annual plants manure gives even better results if put on in the spring, or about the time the seed is sown.

I am positive there is nothing gained by spreading in the fields fresh made manure. Manure has to go through a decomposition before it can be taken up by plants. The way some folks talk and write one would presume the plants had mouths (and full of teeth at that) to eat the long straw that the cattle failed to eat. Manure is better well piled up (the more solid the better). Out-doors is probably not as good as that which is covered, but if kept in narrow and high heaps it will get into good shape during one summer.

I always manage to have my manure in one heap and get it well mixed; giving a few loads (wheel-barrow) of cow, then horse manure spread evenly over the surface of pile. I keep a long dry plank for a wheelway to get up on the heap, keep the barrow inside where it is always dry and ready for use when wanted. I also add the hen and hog manure, leached and unleached ashes, soot and brine to the same manure court, and we never have any fire-fanged manure, or that washed and bleached from the roof drippings during rainy weather.

SAND BEACH. R. A. BROWN.

R. D. M. Edwards, of Horton, is president of the National Merino Sheep Register Association; R. O. Logan, of California, secretary, and F. T. Moore, of Green Springs, Ohio, treasurer. The ninth annual meeting was held at Jackson on the 11th, with good attendance, including delegates from Ohio, Michigan and Wisconsin.

The Horse.

WESTERN FEARNAUGHT.

ANDERSON, Livingston Co., Dec. 4, 1889.

To the Editor of the Michigan Farmer.

DEAR SIR:—As a reader of the MICHIGAN FARMER I wish you would inform me where the horse known as old Western Fearnaught is owned, also the name and address of his owner if possible, through your columns. ED. BULLIS.

Answer.—Western Fearnaught 941, which we presume you refer to, is owned by John Axford, of Oxford, Oakland Co. He is now 26 years old, and therefore entitled to be called "old Western Fearnaught." The last time we saw him, at the Pontiac Fair two years ago, he was looking as if he still had a long life before him.

THE VALUE OF THOROUGHBRED BLOOD IN THE TROTTER.

Only three mares, says the editor of the horse department in the *American Cultivator*, have as yet attained the honor of producing a stallion with a record of 2.12¼ or better. These are Lou, by Mambrino Boy (3.26¼), which brought Axtell (2.12); Fleetwing, by Rysdyk's Hambletonian, that produced Stamboul (2.12¼), and Dame Winnie, the dam of Palo Alto (2.12¼). Dame Winnie is described in the Palo Alto catalogue as a "chestnut mare, 15½ hands high, with a small star and white on off hind foot." She was bred by A. J. Alexander, at the renowned Woodburn Farm, Lexington, Ky., and foaled in 1871.

Dame Winnie's pedigree is ironclad and bombproof. There is no crevice about it in which the inspired theorist can insert the thinnest wedge of doubt. Her sire, Planet, was not only thoroughbred, but was a celebrated race horse as well. He was got by Revenue, son of imported Trustee, out of Nina, a daughter of the renowned inbred Diomed race horse Boston, whose turf career extended over a period of six years, from 1836 to 1841 inclusive, during which he started forty-five times and won forty races, thirty of which were of four-mile heats. It is needless to remark that Boston got the second dam of Maud S. (2.8¾), or that his renowned son Lexington got the second dam of Jay-Eye-See (2.10), for every horseman knows that fact.

The dam of Dame Winnie was Liz Mardis, by imported Glencoe. Her second dam was Fanny G., by imported Margrave, and Fanny G. was also the granddam of Alma Mater, the most noted daughter of Mambrino Patchen as a producer of 2.30 performers.

Dame Winnie's third dam was Lancess, by Lance, son of American Eclipse, another grandson of old Diomed, and the greatest race horse ever raised in the North. Her fourth dam was Aurora, by Aratus, and Aratus was by Director, by Sir Archy, by far the best son of imported Diomed, and a horse which every thorough student of equine literature knows did more to improve the speed, courage and stamina of the stock of this country, runners, trotters and pacers, than any other horse that ever set foot on American soil.

It is doubtful if there is another thoroughbred living which shows such a remarkable combination of the best of plastic thoroughbred strains as Dame Winnie. That of Trustee is frequently met with close up in such sires as John Nelson, sire of four in the 2.30 list, Auditor, sire of Epaulett (2.19) and several others that have beaten 2.30. The Glencoe strain is a prominent factor in the pedigrees of the dams of such trotters as Jay-Eye-See (2.10), Favonia (2.15), J. B. Richardson (2.17½), Repetition (2.19¼), and many others of note. The Margrave cross is found in Edward Everett, sire of Judge Fullerton (2.18), in Ashland, sire of the dam of Edwin Thorne (2.16¼), and some other fast ones. The Aratus strain is found in Tom Rolfe, which got Young Rolfe (2.21¼), sire of Nelson (2.14¼). Tom, Rolfe also got Pocahontas Boy, sire of the fast pacers Buffalo Girl (2.12½), Raven Boy (2.15¾), and several others that have beaten 2.30, and also of the trotters Highland Maid (2.29¼), Highland Mary (2.26) and Polka Dot (2.28).

Planet, sire of Dame Winnie, was full brother to Exchequer, sire of Lucille (2.21) and Rigolette (2.23). Exchequer also got the dam of the double-gaited turf performer Minnie R., whose trotting record is 2.19 and pacing record 2.16¼. Planet, though a thoroughbred race horse, and a first-class one too, was a natural trotter. Mr. S. D. Bruce speaks of him in the "American Turf Register" for 1870, page 351, as follows: "It is said that Planet, a horse who won fifty-seven races and more than $60,000, retiring from the turf sound in wind and limb, trotted in about three minutes while in training as a race horse. The remark which follows is truly prophetic. "Now," continues Mr. Bruce, "from a stallion possessing his natural trotting action, combined with his powers of endurance and extra blood of imported Trustee and Sir Charles (the former sire of Trustee Jr., who trotted twenty miles within the hour), and the Boston and Lottery blood, a race of trotters should spring that would surpass the get of anything upon the turf by our trotting stallions." We believe no one has ever proclaimed to the world that Mr Bruce was endowed with inspiration, but his suggestion, made nearly twenty years ago, in regard to what might be expected from the produce of Planet, has actually come to pass. There is probably not a faster stallion living to-day, nor has there ever been in the past, than Palo Alto, a grandson of this distinguished race horse Planet.

Dame Winnie entered upon her career as a brood mare in 1878, when she was mated with Smuggler (2.15¼). The produce was a bay filly, which died. The following year she was barren. In 1881 she produced Big Jim, which got a record of 2.23¾ this season, and afterwards dropped dead in a race. He was by Gen. Benton. In 1882 she produced the wonderful trotting stallion Palo Alto, by Electioneer. Palo Alto started in nine races as a four-year-old, winning first money in eight and second in one, getting a record of 2.20¼. This year he has started several times, and swept the board clean, reducing his record to 2.12¼, and showing much speed courage and stamina as to warrant the belief that he will yet place the stallion record much lower than it now stands. The produce of Dame Winnie in 1883 was Gertrude Russell, by Electioneer. Last season this mare got a record of 2.23¾, and has been consigned to the harem. Next season Gertrude is expected to produce a foal by Beverly, a son of Benefit, by Gen. Benton. In 1884 Dame Winnie produced a bay colt called Diavolo, by Shannon, a thoroughbred. In 1885 she was barren. In 1886 she brought the bay filly Winna S., by Electioneer, and in 1887 she produced a bay colt called Paola, by Electioneer. During the past two seasons she has been barren, but has been mated with Electioneer again this season. As she is but eighteen years old, it is hoped she may yet produce several more foals. She has the honor of being the only mare which has produced a stallion with a record of 2.12¼ and two other trotters to beat 2.24.

Forethought for Good Feet.

An experienced shoer claims that most ill-shaped feet were so the first time the horse was taken to the shop. Several in his town have the feet of their colts trimmed every few months until they are shod, and he never saw an imperfect foot on one of them. Colts are born with perfect feet. Nature intended them to run on the ground constantly, and, if they did, their hoofs would wear away evenly, but, instead, they are kept indoors five months of the year; the hoofs become long and break off in pieces from time to time. If a considerable piece breaks off at the side, the foot runs over, like an old boot, and the colt acquires the habit of walking partially on the side of the foot, which is very difficult to remedy. Sometimes both sides break off, leaving the toe unnaturally long, thus throwing more weight on the heels, causing them to wear away faster than they should. This produces flat feet. The uneven breaking-off of the hoofs before the animal matures causes most of the imperfections in the feet of the horse, with resultant ringbones, spavins, curbs and other ailments. When a horse with a bad foot comes to be shod, if it runs over at the side, it should be levelled up gradually at several succeeding shoeings, by making the shoe thicker at one side and paring down the hoof a little the most on the opposite side.

If the feet are flat the heels should be let alone and the toes cut as far back as it will answer at every shoeing. The shoe should never bear on the sole of the foot, but on the wall alone. If the sole is low down and presents a convex surface as is often the case, the shoe should either be made concave, to match, or very narrow to fit only on the horny shell. If the animal has contracted feet the heels should be cut away all it will do, as well as the horn on the bottom of the foot, and the shoes should be bevelled out from the quarters back, that the feet may have a tendency to spread. If the animal has ringbone or any stiffness in the joints the toes should be cut back. This rule applies also to cases of spavin, thoroughpin, curbs, etc. Bad feet in horses are generally traceable to inattention of man. The feet of colts should be attended to once in three months, from the time they are first stabled in the fall until they reach maturity, and then permanent good feet will be assured. If agricultural societies would employ a skillful man to shoe horses at their fairs and give illustrative lectures, they would accomplish more good than they do now by some of their transactions.—*N. Y. Tribune.*

Horse Gossip.

HAVE you seen the 5-A five-mile horse blanket? If not, why not? If you have a horse you need it.

BLUE BULL has a grand-daughter in the :20 list—Gipsy Queen, by Rushville, a son of the old horse.

THE Jackson *Citizen* says: "A suit is now pending in our circuit court which involves the validity of Act 280 of 1887, whereby the owner of a stallion has a lien on the colt for services."

J. W. BUTTON, of Campbell, this State, has sold to M. L. Smith, of Ionia, a yearling bay colt by Montgomery 3512, dam Nellie, by Cardinal 1059. Price, $500.

MISS CLARA BEACKIN, of Utica, Macomb County, has sold to A. C. Hayes, of Burgh Hill, Ohio, the two-year-old colt Elko, by Atlantic Boy 11847, dam by Young Volunteer 6682.

E. J. CALDWELL, of Adrian, has purchased from Sutherland & Benjamin, of East Saginaw, the weanling colt Lute, by Sphinx, 3:23, dam Lizzette, by Mambrino Gift 2:30, second dam by a son of Cassius M. Clay.

A SIX months' old colt by Nutwood, dam Alicia, has been sold to Thomas Jefferson, of Lexington, Ky., for $6,000. That is a big price for an untried colt, with all the dangers he has to pass through. But it shows the confidence of breeders in good blood.

MR. B. J. TREACY, of Lexington, Ky., reports the sale to parties at Jackson, this State, of a bay three-year-old filly by The King 2:29, dam Lady Denison, by John Dillard, and the bay colt Spilman, by King Almont, 2:21¼, dam Lady Hemphill, by Mambrino Blitzen, g. dam by Paterson's Iron Duke.

THE Cooper Stock Farm, Birmingham, this State, has sold to M. L. Smith, Ionia, the two-year-old bay gelding Colonel, by Montgomery 3512, dam by a son of Blumberg's Bashaw. To Cass T. Wright, Greenville, for $625, the two-year old bay stallion Mars, by Montgomery 3512, dam Albana, by Lakeland Abdallah. To Harry Hollis, a two-year-old filly by Spartacus, dam by Magna Charta.

AT the annual meeting of the New York State Trotting Horse Breeders' Association, held at Rochester, N. Y., on December 3, the following officers were elected: President, F. G. Babcock, Hornellsville; First Vice-President, H. M. Little, Macedon; Second Vice-President, Dr. J. W. Day, Waterloo; Third Vice-President, C. J. Hamlin, Buffalo; Secretary-Treasurer, M. E. Servis, Rochester. Thirteen new stakes were opened, and a committee consisting of F. G. Babcock, Hornellsville; J. H. Clark, Elmira, and James B. Burlew, Union Springs, appointed to select the place at which the annual races of the Association will be held.

A SUBSCRIBER at Gobleville writes us regarding the pedigree of the horse Hambletonian Dan, sending in a printed card giving his breeding. We know nothing of this horse. His pedigree, if correct, shows he was sired by Country Gentleman, a non-standard son of Hambletonian 10, and registered in first volume of Wallace's Trotting Register. His dam, Lady Moscow, is given as by Grand Tempest, foaled in 1862, and recorded in second volume of Trotting Register. No such mare is recorded. There is a Lady Moscow, sired by Hambletonian 10, foaled in 1866, recorded in second volume, but that cannot be the mare. The pedigree as given on the card must be incorrect.

The Farm.

Fertility Value of Bran.

Wheat bran is very rich in those elements which give it unusual value in bone-making, and which render the manure made from it very valuable as a fertilizer. On this point the sixth annual report of the New York Agricultural Experiment Station says:

"Two thirds of the nitrogen of the grain remains as a part of the flour, but of the mineral elements, phosphates, acids, etc., the larger portion is left in the by products, which are used as animal feed, only about one-fifth of the phosphates being in the bran.

"The high co-efficient of digestibility for the by-products from flour production renders them a most valuable source of animal food, and at the same time so concentrated and rich are they in those elements necessary to a fertile soil that they become, when properly managed, a valuable source of fertilizers. We find that the milling products from one bushel of wheat having a composition like our sample would contain the following amounts of fertilizer matter expressed in pounds:

	Nitrogen.	Acid Phosphates.	Potash.	Lime.
Flour	.759	.092	.054	.013
Middlings	.105	.061	.024	.002
Shipstuff	.056	.044	.033	.003
Bran	.228	.251	.182	.012
Totals	1.128	.451	.343	.030

"The relatively high richness of bran in these valuable manurial elements will be apparent when we consider that the qualities given above are for 44 pounds flour, four pounds middlings, two pounds shipstuffs and 10 pounds bran."

Relative Value of Wheats.

We are all interested in the bread question, and at the bottom of this lies the wheat crop. The different varieties of wheat have different values, both in regard to yield and their nutritive elements. Prof. Saunders, of the Canada Central Experiment Farm; has been experimenting with the different varieties by growing single plants under similar conditions. He divided them into three classes—the Fifes, the Russians and the Indian. He finds the Fifes superior in the amount of nitrogen or muscle-making material which they contain, they making what the bakers call "strong bread." The Russians rank next in nutritive quality, and the Indian varieties come last, and are also the least prolific. Ten plants of Fife wheat averaged 25 heads to the plant, with 25 kernels in each head, a yield of 731 fold. Five samples from the United States Northwest yielded 550 fold, and five from the Canadian Northwest, 913 fold. The Russian bearded averaged 21 heads to the plant with 46 kernels to the head, or 953 fold. Six samples of Indian wheat averaged only nine heads to the plant, with 41 kernels to the head, or 349 fold. These facts will naturally suggest the culture of the Fife and Russian wheats, and the selection of seed from the sections showing the largest yield, as the most vigorous and prolific berry is likely to be found there.—*Mirror and Farmer.*

The Chemistry of Foods.

Prof. E. F. Ladd, of the N. Y. State Experiment Station, read a paper on the above subject at the Farmers' Institute at Plattsburg, in which he said:

"But a few years ago the terms nitrogen, phosphoric acid and potash were almost unknown to the farmers of our State. With a soil producing bountiful crops with little or no cultivation, they had little need to inquire as to the source or amount of fertilizing matter contained in the crops grown. With failing crops from depletion of the soil, and the close competition in our markets with crops grown upon the cheap and productive lands of the west, farmers were forced to use commercial fertilizers. They soon learned that these fertilizers were purchased and used solely for the nitrogen, phosphoric acid and potash which they contained, and to-day these terms are familiar words in the vocabulary of every progressive farmer.

"One-half of the money expended for commercial fertilizers is wasted, from a proper lack of knowledge as to their use and needs of one's soil. With the tons of nitrogen everywhere about us, constituting four-fifths of all the air, it seems there should be no need of purchasing this most expensive of all the fertilizing constituents required in plant growth; and I believe the time will come when by a proper system of crop rotation and cultivation we shall be able to draw our needed nitrogen from nature's bountiful supply. The recent experiments at the Storrs Experiment Station inspires much hope that this will prove true. As to-day it is generally recognized that a rational system of fertilization is essential to successful crop production, so a rational system of cattle feeding is just as essential to success in the production of growth of beef, or of milk and butter.

"The feeder who succeeds best in compounding a ration to produce a desired effect, must know something of the chemistry of foods, their digestibility, palatableness and physiological effect. Some foods seem to tend to the production of lean meat in the growing animal, some to fat meat, some to milk, while others tend to increase the butter fat in the milk without increasing the milk yield. Again, food influences vary materially in the physical and chemical properties of the butter fats. Corn meal fed in connection with good hay produces a hard, firm butter, while linseed meal produces a soft, white butter, containing three to four per cent. more olein than was found in the butter produced from corn meal. So we see from experiments made at the Geneva Station, that food may influence to a considerable extent the animal products."

Prof. Ladd had a quantity of samples on hand with which he illustrated his subject, especially their nature and adaptability to certain purposes, an exhibit which attracted a good deal of interest and attention.

How to Tell Good Oats.

Good oats are clean, hard, dry, sweet, heavy, plump, full of flour and rattle like shot. They have a clean and almost metallic luster. Each oat in a well grown sample is nearly of the same size. There are but few small and imperfect grains. The hard pressure of the nail on an oat should leave little or no mark. The kernel when pressed between the teeth, should clip rather than tear. The skin should be thin. The size of the kernel will be less in proportion than the skin is thick. The color of the oat is not very material, but white oats are generally thinner in the skin than black. Again, black oats will grow on inferior soils. Short, plump oats are preferable to large, long grains. Bearded oats must have an excess of husk. Oats are not necessarily bad because they are thin skinned or bearded; but they must contain a less amount of flour per bushel than the thin skinned oats without beards.

Practical Swine Feeding.

Theodore Louis, of Dunn Co., Wis., feeds a great many swine every year. He breeds with the fixed purpose of producing hogs that will mature early, feeds to secure the most rapid growth consistent with the health of the swine, being careful to feed a well balanced ration of corn, oats, shorts, some roots, unless they have good clover pasture. As a means of maintaining a healthy condition, accompanied by a good appetite and assimilation, he feeds a mixture of two bushels of charcoal, measured after broken fine; one and a quarter pounds of copperas, ground fine or dissolved in water; eight pounds of salt and 16 quarts of wood ashes. Of this mixture he feeds three bushels a week to forty-eight hogs. The results are highly satisfactory in maintaining good health in the herd and, he thinks, in aiding assimilation of the food given.

Agricultural Items.

IN Victoria, Australia, the government has provided for a staff of teachers, who, with all the implements of butter and cheese making, travel from place to place and teach farmers the best methods of making butter and cheese.

AN Ohio farmer complains that when clover seed gets into the hands of dealers it is all clover seed and no attention is paid to varieties, consequently the farmer cannot tell till he sees his field in bloom what variety he has grown.

THE Cincinnati *Price-Current* figures the potato crop of the United States at 175,029,000 bushels for 1889; the western section having 16,000,000 bushels above the usual average with which to supply the deficit of the middle and eastern sections.

A. W. CHEEVER, editor of the *N. E. Farmer*, has by years of breeding, eliminated horns from his dairy herd. An Ohio man has also hornless Jerseys, the result of crossing a "mooley" cow and a Jersey bull, the horns disappearing in the third generation.

FORTY persons competed for the prize of $10,000 offered by the Illinois State Grange for a machine which will bind grain with straw instead of twine. A full-sized working model was accepted, but its owner declined to deed away his interest in the machine for the sum named, having been offered a much larger sum for the patent. The machine is said to be extremely practical in its workings.

IT should give a farmer whose cows average from 150 to 175 pounds of butter per year, food for reflection to know that there are cows whose record for a year by actual tests is 800 pounds, and one, Landseer's Fancy, has produced over 900 pounds. But without doubt the most profitable are those who can produce 500 or 600 pounds of butter in the year, on moderate dairy rations.

T. B. TERRY says, in the *Country Gentleman:* "How easy it is to tell people what to do, and how difficult it is to know what it is best to do one's self, sometimes!" That's so. We have often thought the same thing in reading some agricultural precepts founded on beautiful theories. Every little while some emergency arises which knocks precepts and theories "higher 'n a kite," and makes a man anxious for a little horse sense.

GEN. JOHN BIDWELL is said by an enthusiastic visitor to have "the finest farm in America." He owns 22,000 acres on the Sacramento river, which he bought from the Mexican government in 1841, before the gold fever begun. He raised 100,000 bushels of wheat and 40,000 bushels of barley this year; has 1,500 acres in fruits, canning 350,000 cans per year. He has 500 horses, 1,000 cattle, 6,000 sheep and 10,000 swine on the farm. His sales are about $750,000 annually, and he pays $100,000 for the one item of help.

GEORGE NEWELL says, in the *American Dairyman:* "On account of the superabundance of potatoes this year and the consequent low price, many farmers may be tempted to feed out the tubers to live stock. Cattle will eat them with avidity, and although a most esculent root, the potato has little to recommend it to cows in milk. Potatoes will generate a thin, poor milk with bad flavor, and if there is an overfeed the debilitating scouring its entails on the cow demoralizes her physical status and abridges the lactic flow. If you have surplus potatoes to feed out give them to young stock and not to milch animals."

As winter approaches petty thieves begin to annoy farmers. A few chickens, a sheep, a ham or a little grain are frequently missed. One who had fowls from time to time clipped a toe-nail from each of those remaining, and when more were missed went to the village poultry dealers, identified his fowls and soon captured the thief. One who had missed ears of corn from his crib spent half a day whittling pine plugs and driving them into the pith of the corn-ears at the butt and cutting them off smoothly. These he placed on top. Soon more corn was gone, and he then went to a neighbor's hogpen and there found some of the plugged cobs. He had kept a "thief account" for several years, and compelled this culprit to foot the whole bill.—*N. Y. Tribune.*

The Holidays

And the cold winter weather are now rapidly approaching. The joyful season is eagerly anticipated by young folks in thousands of homes; but in nearly all there are one or more older ones to whom the cold waves and the storms mean renewed suffering from rheumatic back or limbs. It is not claimed that Hood's Sarsaparilla is a positive specific for rheumatism; we doubt if there is or can be such a remedy. But the remarkable success Hood's Sarsaparilla has had in curing this affection is sufficient reason for those who are suffering to try this peculiar medicine.

The Poultry Yard.

Feeding Poultry.

Prof. C. F. R. Bellows, of Ypsilanti, who raises poultry as a diversion and relaxation after the mental labor incident to getting up abstruse geometrical problems to worry Normal students, and who yet is very business-like in his poultry business, tells the *Poultry Breeder* how he manages the feeding problem:

"My method of feeding varies so much that I can hardly describe it. In the main it is as follows: Soft feeding in the morning, made up of corn and ground oats one part, wheat bran two parts, mixed with boiling water.

"A light feed at noon consisting of scraps from the house, green stuff, etc., into which twice or three times a week is put also a little meat. At night I feed the young birds corn, and the old ones wheat and oats, changing from one to the other from day to day, with an occasional feed of corn.

"Twice or three times a week a kettle of boiled potatoes goes in the morning feed. As the pullets mature I lighten up on the corn as a regular feed, substituting wheat and oats.

"The above is the basis of my feeding, as I would say, but in that I constantly consider that variety and not uniformity is the spice of chicken life."

Treatment of Roup.

Mr. Boyer, in the *Germantown Telegraph*, says: My plan for roup is this: If you have bad cases cut off their heads and bury them. If you have cured them, sell or eat them, for the least inclemency of the weather is apt to bring a relapse. Cured roupy fowls are more apt to catch colds than those that never had it. Add about a gill of kerosene to every gallon of drinking water, and give to the well fowls to drink. Fumigate the building by burning sulphur in it. Pour kerosene over the roosts and nests. Clean up the yards and houses, and enforce strict sanitary measures. You will not only stamp out the old, but will prevent the new. Fowls will get sick, but two-thirds of the ailments can be prevented. The best poultry doctor is the one that can prevent diseases. It is an art, however, and must be learned, but after you once know it, it is far easier than cure.

THE best feed for ducks at first is half and half bran and meal, and a portion of beef scrap. As the birds grow, reduce the bran and increase the meal. Be careful to feed no sour food. This is the advice of a New England duck-grower who has had 1,500 ducks hatched and raised every one, whose usual losses are not over two per cent of ducks and five per cent of chicks.

SORGHUM seed is excellent for poultry. It is good for their health, and fairly good as an egg-producing food. But corn is after all the staple food when fed in moderation. Give the feed of whole corn at night, soft food being rapidly digested and the crop becoming empty before morning. The refuse after the fall butchering is splendid food for the hens and all scraps of fresh meat should be utilized in their feed. The cracklings from which the lard has been fried are good for them. They relish bacon rinds if boiled till soft.

MR. RANKIN, at the first of the farmers' meetings at Boston for the season of 1889-90, said he abandoned the milk business and small fruits to devote himself to poultry, because he found that dressed poultry sold for three times as much as beef or pork and cost less per pound to raise; and he found later that ducks could be raised at a still smaller cost, in half the time, and bring still better profits. And his profits are good and his business remunerative. Labor is the greatest expense, and the toil is constant and unremitting. He uses incubators, finds Light Brahmas and Plymouth Rocks the best for setters, and a cross of the two breeds makes fine market poultry and good layers and setters.

G. Q. Dow, in the *Country Gentleman*, says: "It surely does not follow that one kind of feed which cost one cent a pound is cheaper than one which costs two cents, simply because you pay one cent less for the same quantity in weight. Good sound, clean wheat will cost one and a half cents a pound, and yet you can buy wheat screenings for three-quarters of a cent a pound; but one does not have to experiment very long to find out which is the cheapest for him to buy. One ton of good wheat will go farther than three tons of the dusty screenings; in fact, no amount of the screenings can be made to perform the work the sound wheat will do. I consider them dear food to buy at any price. It is just so with all other feeds, and in many cases worse. I am using a feed for my fowls to-day that costs me three cents a pound by the ton, and I consider it one of the cheapest foods I use, as there is not an ounce that does not contain the most healthful nourishment, of the very richest and best part of the grain, which has all been cooked."

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Horticultural.

Fruit-Growing in Essex.

It is estimated that the county of Essex, Ont., contains over one thousand acres of vineyard, or nearly one-fourth of the entire vineyard area of Ontario. In acreage under vines the county unquestionably leads the other counties of Canada. This is true also in the production of wine, and in a more marked degree, for, while in most parts of the province a large proportion of the grapes are sold for eating, in Essex probably nine-tenths of the annual crop is converted into wine. Another distinguishing characteristic of Essex vineyarding is that most of the wine, of which several hundred thousand gallons are produced per annum, is claret, while in the Niagara district and other central Ontario counties the product is largely sweet wines, heavily sugared. The Essex clarets have already, notwitnstanding the comparative newness of the wine-growing industry, acquired considerable repute; and certainly rival in quality some of the best known California clarets. They are sold extensively for table use in several parts of Ontario, and in large quantities in the Province of Quebec. In fact it is even suspected that, like much of the California wine, some of the Essex wine is put up by eastern dealers under French labels.

By far the greater portion of the Essex clarets are made from the well-known Concord grape, which is so prolific that Essex vineyards produce two and a half times as much per acre as the vineyards of France, Australia and the Cape. On Pelee Island the Catawba, a wine with a world wide reputation, and celebrated as "dulcet, delicious and dreamy" in one of Longfellow's best known poems, is also produced in considerable quantity. Champagne, although the district is classed by Vizitelly one of the leading European authorities, as not excelled anywhere in America for its productiveness, is not yet amongst the list of Essex wines, probably on account of the expensive cellarage required.

The chief centres of viticulture in Essex are Pelee Island and the neighborhood of Sandwich and Windsor. Many of the growers are from Germany and France, while not a few come from the wine districts of Onio. In no county in Ontario could as much experience in vineyarding be brought together; and it was, therefore, a wise decision of the Ontario Fruit-Growers' Association to arrange that their annual meeting should this year should be held in Windsor. The session, which covers three days—the 10th, 11th and 12th of December –promises to be one of the most important in the history of that famous society to which the development of the rich fruit-growing capacities of this Province is so largely due. Grape culture will occupy a leading place in the discussions of the meeting, but the peach, plum, pear and apple will receive much attention, and important discussions will take place on the utilization of grade fruit and on the question of running fruit trains to meet the increased demands of the fruit trade of the Province.—*The Empire.*

Some New Vegetables Tested in 1889.

"Prove all things; hold fast that which is good," is an injunction of the good book. Now although I do not hold this to apply in all the details of operations in the gardens, especially in such a way as to require us to give a trial to every new vegetable, or every old one under a new name put forth by the different seedsmen and vaunted as being the best in all respects ever introduced (a difficult task indeed it would be and one which would, I fear, be far from satisfactory in its results) still I have made it a point for many years to each season give a test to some one or more of the newer sorts that seemed most worthy of trial.

By so doing I have succeeded in finding some varieties that for my own soil and locality were especially desirable, notable among these being the Alaska pea, a report of which I give a few months since and which for me I consider to be the best early pea grown, while on the other hand I have tried many sorts in different classes of vegetables, which were either inferior to the old standard sorts—or not enough better, at least, to warrant me continuing the trial more than one season.

Tillinghast's Extra Early beet proves to be as is claimed for it, decidedly in advance of any other sort I have tried in forming a finely shaped and well developed root, fit for market several days earlier than other early sorts, and every root of perfect form and color. In quality it compares favorably with those of its class. I think though that for table use in our own family we have never found a beet that we like as well as Early Bassano, though for marketing its lack of color and peculiar form are rather an objection. I like a deep colored beet better if we could at the same time have one as tender and sweet in flavor as Bassano, but in many sorts I have tested I have never yet found such a one.

Therefore for family use I retain that sort, not only for early use but also sown later for storing for winter use, thinking them for the latter purpose much better than the Long Blood which we used to depend on for the winter.

Powell's Prolific bean I planted early as recommended on account of requiring a long season, retaining a part of the seeds for another trial in case of failure and the frost of May 28 destroyed them but being so late did not replant them so can make no report on them but shall try again another season.

By the way, I tried another sort of pole bean this season, which, though not a new variety, was new to me—as in that class we had always heretofore depended on the old black-seeded wax or butter bean—which gave such good satisfaction that I consider it worthy of mention in this connection, that is Giant Wax, which is of gigantic proportions both in growth of vine and also of pods, and we voted them of superior quality as a string bean.

The acorn squash I am much pleased with so far as one season's trial can decide. It yielded well, considerably better than Hubbard has done in recent years for me, is considerably larger, very dry and of good flavor, though not, I think, quite as sweet and rich as the Hubbard at its best. Of its keeping qualities I of course cannot speak yet.

Since writing the above, in reference to acorn squash, we have given it another trial on our table, cooking one that was more nearly matured than those previously used and am ready to modify my judgement as to its quality, pronouncing it fully equal in every respect to any squash I ever tasted. It certainly lacks nothing in either sweetness or richness when compared with Hubbard, which is, I believe, generally accepted as a standard of excellence.

Among the seeds sent me were two sorts of tomatoes, Livingston's New Peach and Atlantic Prize, both of which I wished to try, but on account of sickness, was prevented from starting in the house and so supposed I should be unable to obtain any ripe specimens, I however planted a few seeds of each out of doors when planting my pole beans May 13th, thinking possibly if the season proved long, and unusually favorable, enough of them might ripen, to test the quality of the fruit. On the third day of September I picked one specimen of Atlantic Prize from these plants, which was fully ripened, and three days later we had enough of them for a full mess for the table, and from that time on they continued to ripen until frost came. The quality we called good and their early maturity, ripening in ten days less than four months, greatly pleased as well as surprised me, as I have never before found a sort that would make a very near approach to maturing in so short a time, and being of good size and fairly smooth, it seems to me quite a desirable acquisition. Livingston's New Peach being much later than the above, none of them had ripened or even fairly begun to when the frost killed the vines, but by picking and placing in a window in the sun some of those most nearly matured we did succeed in getting a few of them to ripen in that manner, thus getting an idea of the appearance of the fruit, which is certainly, in looks and form, more like a peach than like a common tomato, and some little idea of the quality, which I should judge would be first-rate if not superior, when ripened on the vines.—*E. J. Brownell, in Orange County Farmer.*

Sweet Potato Growing.

The sweet potato, *Batatas Edulis*, is not properly speaking a potato, but is a member of the Morning Glory family. Not only is this vegetable becoming a most popular one, but the market is gradually developing. The ease and certainty of its cultivation too make it a good crop.

The plants should be grown in ordinary hot beds, which may be heated by manure, hot water or steam. Prepare a level surface and place rather small tubers nearly close enough together to touch. Over them put about an inch of good, friable soil; some prefer sand. More and stronger plants are perhaps secured by using loose, loamy soil which contains an abundance of sand. As the plants appear, give them sufficient air to harden them.

The sweet potato prefers a warm, sandy or loamy soil. The earth should be thrown into ridges at a convenient distance from each other to admit of cultivation with a hoe, rake or narrow cultivator as may be preferred. The ground should be kept well stirred, and cultivation may be facilitated by coiling the vines around each hill. Fertilizer should be used sparingly, if at all, and should be worked well into the hill, as many growers claim that shorter tubers and more compact clusters are produced when this is done.

The plants should be set out as soon as the ground is thoroughly warm, and it is better to rake off the top of the ridges so that the plants can be readily placed at a distance of one and one-half to two feet in the row. Carry a bunch of plants in a bundle of wet moss or in a vessel containing water. The plants may be inserted into an opening made with the fingers, a dibble or a trowel, and the earth should then be closely pressed against them. In the depression around the plant it is always well to pour a little water, but as soon as this has been absorbed, fill the cavity with loose, dry dirt to prevent baking. A foggy or cloudy day is best for planting, but otherwise the afternoon should be selected.

As soon as the tubers have matured the vines should be cut and cleared away. Digging may be done with a spading fork or a plow. Greatest care should be taken to prevent bruising, and drying should be done in the sun. Carefully separate all mutilated or bruised tubers from the others at once. The sweet potato, unlike the Irish, should be stored in a warm, dry atmosphere, and every precaution should be taken against mice.

The red and yellow Nansemond varieties are two of the most popular. The first is perhaps in several respects the best, but in markets where they are not known they are liable to be mistaken for Red Bermudas, which are coarse and unproductive, and against which there is a just prejudice, notwithstanding the fact that they are somewhat earlier than the Nansemond.—*Fruit Grower.*

Orchards in Cold Valleys.

Many years ago the Albany *Cultivator* gave numerous examples in which half tender fruits, like peaches and nectarines, were destroyed by frosts when planted in sheltered valleys, while those on exposed hills escaped. The general belief was that trees not exposed to the bleak winds on the hills would be safer, while the rich land in the valleys was supposed to be more favorable to the growth of the trees. In a recent number of the same paper was given reasons for the losses in the valley:

The cold air on sharp winter nights; made heavier by the exposure, rolled down the sides of the valleys and filled the bottom with a lake of cold air, while warmer air remained above. We have known a difference in sixty feet of altitude to make all the difference between an uninjured crop of peaches on the hill, and its entire destruction at the bottom of the valley. The effect is increased, and the trees as well as the crop sometimes destroyed on account of the rank and succulent growth in the richer soil below, rendering them liable to winter killing, while the well ripened and well hardened growth on the drier and more compact soil was proof against the frost. It sometimes happens, however, that trees growing low down on a compact, well drained and moderately fertile soil will succeed better than those higher up, if on a mucky and water-soaked piece of ground.

In a climate of milder winters, and where the peach crop is never killed by weather below zero, a late English writer says: "I do not believe in planting fruit trees in the bottom of valleys. This is often done to secure the rich soil. But it is of little benefit to the grower to realize a strong growth and an abundant flowering if his crop is destroyed in the flowering by the spring frosts, which has repeatedly happened the last few years in certain localities." This further illustrates the same difficulty—that of frosts in valleys for tender growth.

In all cases, whether high or low in situation, thorough underdrainage should be always given to the ground where orchards are to be planted, unless a good natural drainage already exists with the soil. Those who are about setting out new peach and other orchards the present autumn or preparing the land and trees for them next spring, will find it advantageous to select situations least subject to sharp valley frosts, and to provide in advance ample drainage.

The Wilson, Crescent and Sharpless Strawberries.

A correspondent of the *Country Gentleman*, who writes from Indiana and has grown strawberries for twelve years, says:

"I had at one time no less than 32 varieties, but have discarded all except the Sharpless, Crescent and Wilson. The Wilson is the most slandered berry in existence, but it continues to lead, and will for many years be the main stay as a market berry. In many localities it turns red before it is ripe, and in this state is usually sent to market. When thoroughly ripe its slightly acid flavor is very agreeable, and superior to many highly praised varieties, whose insipid taste causes one to soon tire of them.

"The Crescent stands neglect better than any other kind—in fact, it yields the largest crop under the matted-bed system, but the fruit is small and inferior in quality. The Sharpless on strong, heavy land, well manured and kept in rows, with runners cut, and clean cultivation, exceeds all others in size, yield and quality, remains longer in bearing, and turnishing berries, if properly managed, for several weeks. No matter how much the market may be glutted, they always find a ready sale at good prices. Last season they never brought less than 20c per quart in our market, while Crescents and others were selling as low as five cents, bushels of them spoiling, not finding a sale even at that price.

"The thinning out should be done with reference to the variety. The Sharpless does well for some in hills, but rarely in matted rows. The Wilson does better in thin matted rows, while the Crescent should be quite thick.

"The raising of small fruits for the market is a very nice and very remunerative business when properly managed, but it requires rare business tact and exacting care and attention. Very few farms make sufficient manure for over three to five acres of small fruits. After taking two, or at very outside three, crops of berries from a plantation it should be turned under and put into something else. No one has ever really tasted a strawberry until he grows it himself; berries brought in market bear about the same relation to a freshly picked berry from your bed that a half rotten apple does to a sound ripe one. Mr. Hale, of Glastonbury, Conn., a recognized authority on small fruits, now plants in hills, laying the ground off in check rows. I have not tried this system, but from the fact of Mr. Hale's adopting it, am satisfied it will be a success.

Blanching Celery.

Many methods of blanching celery have been tried, but there seems to be a crisp delicacy of flavor only obtained by a generous banking with earth. Previous to banking, it is customary to tie the stalks in a compact bunch; the earth is then packed as high around the stalks as is deemed advisable. This simple plan blanches the celery all right; but often the stalks are crooked in tying, the celery stained or entered and nibbled by earth worms, if the season is damp. A simple way to remedy these evils is to take strips of straw paper, ten to twelve inches wide, and wrap each stalk in place of tying. A trowel full of earth will hold the paper in place until a row is finished, when the banking can be done. The plants when wrapped should be about 14 inches high and the earth should be drawn up nearly to the top of the paper. The base of the hill should be left broad, so that more earth can be drawn up, if necessary.

Danger in Bleached Dried Fruits.

It is well known that Germany has forbidden the importation of American dried fruits unless accompanied by a chemist's certificate warranting them free from injurious substances. Dr. J. W. Smith, in the *Iowa Intelligencer*, explains how the poisonous oxide of zinc is formed, which has led to the above action of the German authorities:

Fruit is now bleached by all large evaporator establishments and many others. This is well understood by those in the trade and by grocers, but hardly known by most consumers. Bleaching is done by exposing the green fruit to the fumes of burning sulphur in the evaporator, or quite as often before it is placed in the evaporator, the time of exposure to sulphur varying with the degree of whiteness desired. The practice has only become general within a few years. Most grown people recollect the advent of very uniformly white dried apples in 50-pound boxes. There was soon such a craze for the "nice white fruit" that nearly every evaporator company felt compelled, by the increased price of such fruit, to adopt the bleaching process. It is now applied to all kinds of fruits.

To the question are bleached dry fruits ever poisonous Germany answers that they are; after repeated chemical examinations of American evaporated dried apples, zinc—poisonous in very small quantities—being found to such an extent in the samples that all such fruit was ordered destroyed, and a decree issued forbidding future importations unless accompanied by a chemist's certificate that each lot or invoice was free from injurious substance. Such action—as there is no competition with such fruit—may well set the American public to thinking, and better lead to some action against the bleaching of fruit. Greater and uniform whiteness is the chief recommendation of the practice and against it are the losses and dangers from the bleaching. No farmer thinks his hay is improved when bleached by such innocent agents as sunshine, dew and rain.

The zinc found by German chemists is evidently from the zinc-coated or "galvanized" iron trays used in many if not most of the evaporators to hold the fruit while drying. Some sour fruits may act slightly on zinc, but it is chiefly from the burning of the sulphur, which causes the formation of sulphurous acid, and this acid in contact with water and air—as in an evaporator—is oxidized or changed to sulphuric acid—known also as oil of vitriol—and though in a very weak form, it readily acts upon zinc, as is shown in telegraphic and other galvanic batteries. If not always poisonous, careful tasters know that bleaching always injures the fruit flavor. This is probably why many have lost their former relish for dried fruits.

Rapid Increase.

A correspondent of *Vick's Magazine*, advising a beginner in fruit culture, reminds him how easy it is to propagate from a few plants enough to start a large plantation, thus saving a large bill of expense for plants:

A good, strong Hilborn, Souhegan or Gregg raspberry plant, set next spring, on very rich ground, can be made to branch into sixty tips, each one of which will root into a plant. This is much beyond the average, and you can figure on an increase of from twelve or twenty fold. Suckering raspberries, like the Turner and Cuthbert, will under favorable circumstances, increase one hundred-fold in one year, a dozen plants making enough in two years to plant several acres. From a good, strong plant of Taylor's Erie, or Minnewaski blackberry grown from a root cutting and dug with all the roots, one hundred or more root cuttings two and one-half inches long can be cut, that properly managed will make ninety or more plants another year. One thousand such cuttings packed in four layers, with moist earth, in a small, shallow box, and buried below frost in a dry place, will callous during winter, and planted in a drill one inch deep at corn-planting time, will make $40 or $50 worth of plants by fall with proper care.

A neighbor, last autumn, set out half a dozen Fay's Prolific currants, strong one-year plants, and I think that each could furnish twenty seven-inch cuttings without injuring the plants or over-pruning.

I once layered from a Houghton gooseberry bush, three years old, one hundred and six plants in a single summer.

Orange quince bushes cost $16 to $20 per hundred at two years of age, yet a single stock can be made to grow from twenty to fifty in a single summer, yet in this case it requires four or five years to get the stock into proper shape for extensive layering.

Winter Protection for Grapes.

It occasionally happens that an exceptionally cold winter brings the subject of winter protection very forcibly to the notice of all who grow grapes. Even the hardiest grapes are sometimes more or less injured, and whilst on the other hand there are seasons so mild that grape vines pass through them equally well without protection, yet the most prudent course is to persistently and regularly protect them during the winter.

To do this in what is perhaps the easiest and best way, prune in the fall and lay the canes upon the ground covering them with earth to the depth of about three inches. This will afford sufficient protection to even the tenderest varieties. The hardier sorts often receive all the protection necessary by simply being laid upon the ground, but a slight covering renders it more certain and is very little trouble. At the north, the snow provides this and is better than any covering we may devise.—*Orchard and Garden.*

Horticultural Items.

Ontario has nearly two hundred thousand acres of apple orchards.

Ten years are considered the average life of a variety of the tomato.

Over sixteen million pounds of dried apples were exported from this country during nine months of the current year.

Never prop a fruit tree, says the *N. E. Homestead.* If the load is too heavy thin the fruit, and make what is left better than it could possibly be if overcrowded.

An Indianapolis sparrow hunter has caught about thirty thousand sparrows the past season. He catches them for shooting clubs, &c. And yet he says he is only tainning them out a little.

Of the seven weeds which the "weed law" of Wisconsin requires farmers, under penalty, to destroy, only one is a native of the United States, all the rest being naturalized importations from Europe, where they are common wild plants.

L. Woolverton, of Grimsby, Ont., once took from a large Greening apple tree, 15 barrels of fruit. The same tree, earlier in its history, has a record of 20 barrels. Mr. Woolverton's 100-acre orchard is favorably located and bears fine crops.

Frequent transplanting of the young plant, and good tillage are essential to test results in tomato culture. Plants started under glass ten weeks before transplanting into the field, will give fruit about a week sooner than those started two or three weeks later.

The *Orange County Farmer* says: "Peach culture seems to be coming to the front again in this part of the world. For many years but few peaches were grown, but of late they seem to have taken a new lease of life and apparently do well. The trees cost so little that every farmer should have a few. If he gets but one crop before the tree dies, it is a good investment all the same."

The Massachusetts Horticultural Society will finish its 61st year of existence February 24, 1890, having been organized in 1829. At its second meeting, 160 names had been inscribed upon its books, having paid $5 admission fee and an assessment of $2. The Society is now the most widely known and most influential among its kindred, and its annual and special exhibitions are "drawing features" of New England horticulture.

G. Q. Dow, in the *Orange County Farmer*, says, speaking of strawberries: "Pistillate varieties invariably give us the largest fruit, the largest quantity and I think the best. But we cannot confine ourselves to them alone. We must have a few staminate varieties to fertilize the others. The best varieties to-day are pistillate. If you only want to set out one kind and want that to be the best general used strawberry, select the Bubach No. 5, first, then the Warfield, Cloud or Haverland."

Prof. Goff, before a Wisconsin farmers' institute, said the best preventive as yet known for apple scab is a solution called ammoniacal carbonate of copper; one ounce carbonate of copper dissolved in one quart ammonia, diluted with ninety parts of water, and spraying the tree and fruit with it before the scab is too far advanced. The disease seldom appears in young, vigorous orchards, but is a source of much trouble in old, thickly grown trees. The microscopic spores which produce scab are more susceptible to growth in a damp atmosphere than in dry, hence there is more danger from it in thick growing trees where the sun has not an opportunity to dry out the dews and rain.

Apiarian.

Michigan State Beekeepers' Association.

Clinton, Dec. 1, 1889.

The 24th annual meeting of this association will be held at Lansing in the Capitol building, on Dec. 26 and 27.

Reduced rates have been secured at the Hudson House. Half-fare on nearly all railroads. A few roads charge one and one-third fare for the round trip.

Several very interesting papers have been promised from our leading apiarists.

The question box will be one of the important features. Come prepared to ask and answer questions. A cordial invitation is extended to all. H. D. Cutting, Sec.

Robber Bees.

G. M. Doolittle, in *Gleanings*, says: Musk, spirits of turpentine, kerosene oil, etc., have all been recommended to stop robbing; but I do not believe that, after robbing is well under way, any of them will do any good. When robbers first attack a hive, a few drops of kerosene oil or spirits of turpentine sprinkled on the alighting-board, a few inches from the entrance, will often cause robbers to leave in disgust. However, I find that the best way is to contract the entrance at all times when robbing is likely to occur, so that but few bees can pass at a time. I have also tried leaving a pane of glass up before the entrance, as recommended by some of our English friends across the water, where robbers seem determined to enter any hive, but I do not see that it is in any way superior to contracting the entrance, while it seems to bother the bees of the hive much more. If robbers have really got possession of the hive, throw a sheet over it so that those on the outside cannot get in; and if the colony is good for any thing, they will soon drive out those already in, when the sheet is to be turned so as to get rid of them. Leave the sheet on till near sunset, when it is to be taken off so as to allow the few bees out to get into their hive. Fix the entrance so that but one or two bees can pass at a time, and the next morning they will take care of themselves. Something much better than the sheet for stopping robbers is a beetent, to be set over the whole tent, it is hardly necessary for me to tell him to use it in place of the sheet.

The *Canadian Bee Journal* says the system of employing but one judge to pass upon apiarian exhibits at fairs is wrong, and very far from satisfactory. A single judge may be influenced by personal friendships or animosities, may be "approached" by interested parties, or may chance to be incompetent. There should be three competent judges, and their verdict enhances the honor of winning a prize because it is evidence that the article has passed successfully the critical scrutiny of three judges. There was considerable dissatisfaction over the one-judge policy in this department at the Detroit Exposition, where a cursory survey was made in lieu of a critical examination, and where a trio of judges would have done more satisfactory work.

G. A. Stockwell, in the *Massachusetts Ploughman*, strongly advises beginners in beekeeping not to attempt to raise queens. He says: "The instruction to a beginner on queen-rearing is given in one word—in an emphatic Don't! Don't attempt to swallow a double-humped camel at first; be content with one with one hump. Queen-rearing is no part of a beginners' work, and often is not a successful part of a veteran's work. It does not pay to raise queens for your own use when they may be bought for a dollar, and certainly it does not pay to raise queens to sell when six are sold for five dollars. Some beekeepers may tell you that dollar queens are good for nothing. You may learn by experience that often a dollar queen is as good as a five dollar queen."

MICHIGAN FARMER,

—AND—

STATE JOURNAL OF AGRICULTURE.

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—SUCCESSORS TO—

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MICHIGAN FARMER AND STATE JOURNAL OF AGRICULTURE

DETROIT, SATURDAY, DEC. 14, 1889.

This Paper is Entered at the Detroit Post-office as second class matter.

RENEW YOUR SUBSCRIPTION.

On the first of January several thousand subscriptions to the FARMER expire. It will save the publishers a large amount of trouble if our patrons will renew promptly, and insure our subscribers against the loss of any numbers of the paper. We take all names off our lists at the expiration of the time paid for, and before they can be got on again one or more numbers of the paper may be lost. Besides, it makes considerable extra work in taking off the names and putting them on again. When you read this enclose your dollar to renew for 1890.

WHEAT.

The receipts of wheat in this market the past week amounted to 91,505 bu., against 83,303 bu. the previous week, and 64 362 bu. for corresponding week in 1888. Shipments for the week were 15 523 bu., against 30,894 bu. the previous week, and 78,145 bu. the corresponding week last year. The stocks of wheat now held in this city amount to 428 000 bu., against 377,458 bu. last week, and 911,224 bu. at the corresponding date in 1888. The visible supply of this grain on Dec. 7 was 31,340 664 bu. against 31,473,359 bu. the previous week, and 36,659,953 bu. for the corresponding week in 1888. This shows an increase above the amount reported the previous week of 1,-867,305 bushels. As compared with a year ago the visible supply shows a decrease of 3,319,289 bu.

The market has struggled along the past week in an uncertain way, with fluctuations in value confined in narrow limits, and finally closing a few points lower than a week ago. The visible supply again showed a considerable increase. The weather has been against the market, as it not only furnishes arguments for the "bear" side by bringing forward the wheat on the ground, but the western farmer is given an opportunity to market every bushel he wishes at a time when he is generally cut off from the market by bad weather and worse roads. The result is the large deliveries at the west have kept prices down ever since harvest, and until winter closes down, or that country is exhausted of its supplies, there will not be much strength in the market. But later on these very facts will help the market, as it will become apparent that the crop of the west will cut no further figure in the supply for the balance of the crop year. Yesterday there was weakness apparent in nearly all home markets, Chicago, New York and St. Louis, as well as our own, showing a slight decline from the previous day. Meanwhile a "blizzard" is said to be coming, and if a severe one, look out for a shortening up of the supply of wheat, and a much stronger market.

The following table exhibits the daily closing prices of spot wheat in this market from November 15th to December 13th inclusive:

	No. 1 White.	No. 2 Red.	No. 3 Red.
Nov. 15	80¾	82¼	73½
" 16	80¾	82½	73
" 18	80½	82	73
" 19	80½	81¾	73
" 20	80¾	82½	73¼
" 21	80	82	73
" 22	80	81¾	72½
" 23	79½	81¼	73½
" 25	78½	81	73
" 26	78⅝	81¼	73
" 27	79¼	81½	73
" 28	....	....	....
" 29	79	81	72¾
" 30	79	81¼	73
Dec. 2	79	81½	73
" 3	79¾	81⅝	73
" 4	79¾	81⅜	73
" 5	79½	81¼	....
" 6	79¼	81¼	....
" 7	79¼	80¾	72
" 9	79½	80⅝	71½
" 10	....	80¾	72
" 11	79½	81	72
" 12	79⅜	81	72¼
" 13	79	80½	72

No. 2 white sold at 71½c, No. 4 red at 65½c, and rejected at 61c per bu.

The following is a record of the closing prices on the various deals in futures each day during the past week:

	Dec.	Jan.	May.
Saturday	8 ⅝	....	....
Monday	80⅝	81¼	....
Tuesday	81	81¾	...
Wednesday	81½	81½	....
Thursday	8 ½	....	....
Friday	81¼	80¾	84

The continued warm weather and local rains have been excellent for wheat, and it is in far better shape than was once thought possible.

The London *Miller* says American flour is squeezing the profits out of the British mills, and the exports seem likely to keep up.

The Agricultural Bureau of Ontario reduces its estimates of the wheat crop to 18,-000,000 bu.

The Manitoba wheat crop has been largely over-estimated. Conservative estimates now place it at 7,000,000 to 8,000,000 bu., instead of the Canadian Pacific Railroad estimate of 12,000 000 to 14,000 000 bu.

The Winnipeg *Commercial* thus refers to the situation:

"The local situation has been characterized by a sharp upward movement in prices, due to competition among leading milling firms. The falling off in deliveries by farmers caused some alarm on the part of millers as to their ability to obtain supplies necessary for the season's grinding. This led to bidding more sharply for the wheat, and has resulted in a regular fight for the grain between millers."

The Government crop report for December says of wheat:

"The returns of condition of wheat this autumn are generally favorable. There is no serious impairment from the standard of normal development in any State except Michigan. In the east seeding was delayed by wet weather; in the west by drouth. In both sections the later conditions have been more favorable. In the south the seeding season has been propitious and the seed bed in good condition for germination. In Texas wheat has a fine growth in many fields. The plant is 'high enough to hide a rabbit.' In the west the growth is generlly small, but thrifty. The general average of condition is 95."

The following table shows the quantity of wheat "in sight" at the dates named, in the United States, Canada and on passage to Great Britain and the Continent of Europe:

	Bushels.
Visible supply	30,124,056
On passage for United Kingdom	14,392,000
On passage for Continent of Europe	3,744,000
Total bushels Nov. 23, 1889	48,260,056
Total previous week	46,337 778
Total two weeks ago	44 751,259
Total Nov. 24, 1888	60,3:2,047

The estimated receipts of foreign and home-grown wheat in the English markets during the week ending November 30 were 1,337,240 bu. more than the estimated consumption; and for the eight weeks ending Nov. 16 the receipts are estimated to have been 6,519,648 bu. more than the consumption. The receipts show a decrease for those eight weeks of 1,605 896 bu. as compared with the corresponding eight weeks in 1888.

Shipments of wheat from India for the week ending Nov. 30, 1889, as per special cable to the New York Produce Exchange, aggregated 960,000 bu., of which 760,000 bu. were for the United Kingdom and 200,-000 bu. for the Continent. The shipments for the previous week, as cabled, amounted to 440,000 bu., of which 320,000 went to the United Kingdom, and 120 000 to the Continent. The shipments from that country from April 1, the beginning of the crop year, to Nov. 30, aggregate 18,200,000 bu., of which 12 680,000 bu. went to the United Kingdom, and 5,520,000 bu. to the Continent. For the corresponding period in 1888 the shipments were 27,780,000 bu. The wheat on passage from India Nov. 19 was estimated at 2 096 000 bu. One year ago the quantity was 3,168,000 bu.

The Liverpool market on Friday was quoted firm, with fair demand. Quotations for American wheat were as follows: No. 2 winter, 6s. 9d.@6s. 10d. per cental; No. 2 spring, 7s. 2d.@7s. 3d.; California No. 1, 7s. 2½d.@7s. 3½d.

CORN AND OATS.

CORN.

The receipts of corn in this market the past week were 19 764 bu. against 22,349 bu. the previous week, and 58,797 bu. for the corresponding week in 1888. Shipments for the week were 7,575 bu. against 4 664 bu the previous week, and 93 610 bu. for the corresponding week in 1888. The visible supply of corn in the country on Dec. 7th amounted to 5 729 390 bu., against 6,204,-128 bu. the previous week, and 6,570,017 bu. at the same date in 1888. The visible supply shows a decrease during the week indicated of 474,738 bu. The stocks now held in this city amount to 20 076 bu. against 18,980 last week, and 39,170 bu. at the corresponding date in 1888. Corn has lost its strength, not from any big supply received at this point, where shipments exceed the receipts, but from the reports of larger receipts at western points and the consequent decline of values there. No. 2 is now quoted at 34c per bu., January futures at 32½c, and May at 35c; No. 3 closed at 31½c, No. 4 at 29¾c, and No. 3 yellow at 32½c. At Chicago prices also declined yesterday, but are very close to the range of a week ago. Yesterday No. 2 spot sold there at 31⅜c per bu., December futures at 31⅜c, and May at 33⅜c.

The Liverpool market yesterday was quoted firm with fair demand. New mixed western, 4s. 2d. per cental. In futures December sold at 4s. 1½d., January at 3s. 11⅜d. and February at 3s. 11d., all closing firm.

OATS.

The receipts at this point for the week were 64,613 bu., against 26,767 bu. the previous week, and 16,461 bu. for the corresponding week last year. The shipments for the week were none against none the previous week, and 15,198 bu. same week in 1888. The visible supply of this grain on December 7th was 4 869 318 bu., against 5,116,954 bu. the previous week and 7,831,416 bu. at the corresponding date in 1888. The visible supply shows a decrease of 247,636 bu. for the week indicated. Stocks held in store here amount to 144,642 bu., against 117,566 bu. the previous week, and 20,255 bu. the corresponding week in 1888. Oats advanced early in the week, but have dropped back slightly below the prices quoted a week ago. No. 2 white closed yesterday at 26c per bu., No. 2 mixed at 24c, and light mixed at 25c. Receipts have been large the past week, and stocks on hand are accumulating. At Chicago oats were also lower yesterday, spot selling at 20½c for No. 2 mixed. In futures No. 2 mixed for December closed at 20½c per bu., and for May at 22½c. The New York market is easy with No. 2 white slightly higher. Quotations yesterday were as follows: No. 2 white, 31½@31c; mixed western, 27@30c; white western, 30@35c. In futures No. 2 mixed for December, closed at 28¾c and January at 28⅝c per bu.

DAIRY PRODUCTS.

BUTTER.

The market for dairy has declined fully two cents during this week, the result of the warm, muggy weather and large receipts. Most of the receipts show the effects of pastures affected by the frosts, and have to be sold quick. This weakens the price of good butter as well as ordinary stock. For the best dairy 18c is regarded as the top price, while the bulk of sales are made at 16@17c; low grade butter has dropped out of sight. Creamery is quiet at 20@25c per lb., and in liberal supply. At Chicago butter was fairly active. Fine to fancy creamery was in good demand and steady at an advance, while rolls were in only moderate favor. Receipts of fresh butter were not large, though considerable quantities of held summer made goods were coming in. Quotations were as follows: Choice Western creamery, 26½@28c per lb.; Elgin district or fancy, 28@28½c per lb.; fair to good, 23@25c; choice dairies, 22@25c; poor to streaked lots, 18@20c; rolls, 14½@16c; packing stock, 10@12½c. The New York market, owing to the mild, unfavorable weather, is weaker and slow, with lower values on nearly all grades, except fancy Elgin creamery and fancy State dairy. Western packed stock is very dull, but good fresh dairy is steady. Quotations in that market yesterday were as follows:

EASTERN STOCK.

Creamery, State tubs, fancy	20	@26
Creamery, prime	24	@25
Creamery, good	22	@23
Creamery, fair	16	@21
Creamery, Western, June, fancy	18	@19
Creamery, Western, June, choice	16	@17
Creamery, Western, June, ordinary	12	@15
State dairy, tubs, good		@23
State dairy, tubs, fair	15	@18
State dairy, Welsh, fancy	20	@21
State dairy, Welsh, prime	17	@18
State dairy, Welsh, fair to good	14	@15
State dairy, tubs, poor	12	@13
State, entire dairies, firkins and tubs fancy		@21
State, entire dairies, firkins and tubs good	18	@20
State, entire dairies, firkins and tubs fair	15	@17
State dairy, firkins, fancy		@19
State dairy, firkins, choice	17	@18
State dairy, fair to good	15	@16

WESTERN STOCK.

Western Creamery, fancy		@27
Elgin creamery, fancy	29	@29½
Western imitation creamery, choice	21	@23
Western do, good to prime	10	@17
Western dairy, fine	17	@19
Western dairy, good	10	@12
Western dairy, ordinary	9	@ 9½
Western factory, firkins, June	9½	@11½
Western factory, tubs, June	9	@11
Western factory, tubs, fresh fancy	19	@20
Western factory, fresh, prime	14	@17
Western factory good	10	@12
Western dairy and factory, ordinary	7½	@ 8½
Rolls, fresh	13	@18

The exports of butter from New York since May 1st, the beginning of the trade year, compare as follows:

	Exports. lbs.
For week ending Dec. 9	210 409
Same week 1888	76,208
Since May 1, 1889	12,529 128
Same time last year	4, 45,688

CHEESE.

Nothing has occurred in this market to change the situation in regard to cheese, nor does there appear to be any likelihood of a change at present. At Chicago yesterday skims and low grades ruled dull and slow; while there was a fair inquiry for fine goods at former prices. Quotations yesterday were as follows: Full cream autumn made cheddars, 9¾c per lb; do twins, 9½@9¾c; Young Americas, 10@10½c; 1-lb. skims, 8@8½c; low grades, 3@7c; Swiss cheese, No. 1, 10@10½c; brick full creams, 9@9½c. The New York market is unchanged so far as values are concerned, but seems to be duller than a week ago, the drop in cable quotations affecting the shipping demand, and the home trade being also disappointing. Quotations yesterday were as follows:

State factory, full cream fancy, Sept. make, State brand colored	10⅝@10¾
State factory, full cream, fancy, Sept. make, State brand white	10½@10¾
State factory, full cream, fancy, Oct.	10 @10½
State factory, full cream, choice	9½@ 9¾
State factory, fair	9¼@ 9¾
State factory, full cream, common	8½@ 9
State factory, light skims, prime, small	7½@ 8
State factory, skims, prime, large	7 @ 7¾
State factory, skims good	6 @ 6½
State factory, skims, medium	4 @ 5½
State factory, full skims	3 @ 4
Ohio flat, August make	@10
Ohio flat	7½@ 9½

The exports of cheese from New York since May 1 (the beginning of the trade year) compare as follows:

	Exports. lbs
For week ending Dec. 9	1 295,351
Same week 1888	717,463
Since May 1, 1889	63,916 019
Same time last year	58,943 383

The Liverpool market yesterday was quoted dull, with large offerings; and quotations were 54s. 6d. per cwt. for finest colored and white American, a decline of 6d. from the figures quoted a week ago.

Michigan Crop Report, December 1, 1889.

For this report returns have been received from 7 4 correspondents, representing 570 townships. Four hundred and eighty-two of these reports are from 353 townships in the southern four tiers of counties, and 125 reports are from 114 townships in the central counties.

Wheat improved in condition during November in all parts of the State. The average condition in the southern counties on December 1 was 67; in the central, 71; and in the northern, 89; comparison being with vitality and growth of average years. The condition in the southern counties is nine per cent, in the central six per cent, and in the northern four per cent, higher than on November 1. The improvement is attributable to the exceptionally favorable weather. The average rainfall during the month in the southern four tiers of counties was 3.06 inches, or nearly one-fifth of an inch in excess of the normal, while the average temperature did not fall below 18° F. until near the close of the month, when, in some localities, it fell as low as 10° F. A general snowstorm began on the 26th and continued until the 28 h, and furnished an excellent covering for the wheat, but warmer weather set in immediately afterwards, and at this date, December 10, the snow is all gone, and there is no frost in the ground.

Reports have been received of the quantity of wheat marketed by farmers during the month of November at 330 elevators and mills. Of these 256 are in the southern four tiers of counties, which is 44 per cent, and 57 are in the fifth and sixth tiers of counties, which is 49 per cent of the whole number in these sections respectively. The total number of bushels reported marketed is 853,950, of which 162,490 bushels were marketed in the first or southern tier of counties; 196,393 bushels in the second tier; 150,846 bushels in the third tier; 195,178 bushels in the fourth tier; 144,079 bushels in the fifth and sixth tiers; and 4 965 bushels in the northern counties. At 37 elevators and mills, or 11 per cent of the whole number from which reports have been received, there was no wheat marketed during the month.

The total number of bushels of wheat reported marketed in August, September, October and November is 5 398,920.

At 235 elevators and mills that report for both months, the quantity of wheat marketed in November was 39 per cent less than marketed in October.

The average yield of clover seed in the southern counties is 1 71 bushels, in the central 1.98 bushels and in the State 1.76 bushels. In the northern counties a few reports show a remarkably high yield, but the acreage in this section is very small. Owing to the very general loss of seeding in 1888 the aggregate product in the State will hardly reach a full average.

In condition, horses are 96, cattle 93, sheep 95, and swine 98, comparison being with stock in good, healthy, and thrifty condition.

In answer to the question, "Does hog cholera prevail in your locality this fall?" 48 correspondents in the southern counties, four in the central and one in the northern, answer, "Yes." Of the 48 affirmative answers from the southern counties, 30 are from a group of four southwestern counties, viz: Berrien, Cass, St. Joseph and Van Buren. Eight are from Kent, two from Ottawa, and three from Calhoun.

Table III shows, for the State and counties, statistics of wheat, corn and oats grown in the State in 1888, and the acres in wheat in 1889, as reported by the supervisors for the farm statistics of 1888-9. The State totals are as follows:

Acres of wheat harvested in 1888	1,502,879
Bushels of wheat harvested in 1888	23,174,537
Average yield per acre	15.52
Acres of wheat in May, 1888	1,453 648
Acres of corn raised in 1888	919,067
Bushels of ears of corn raised in 1888	54,114 404
Acres of oats raised in 1888	917,920
Bushels of oats raised in 1888	32 630,189

GILBERT R. OSMUN,
Secretary of State.

THE STATE GRANGE.

The annual meeting of the State Grange opened at Lansing, in the House of Representatives, on Tuesday last. Over 100 working delegates were present, and more would arrive. The Chaplain, Mrs. Perry Mayo, read her annual report, and was followed by Flora, Mrs. Amanda Gunnison, who made a report as chairman of the committee appointed at last year's session to correspond with subordinate Granges in the matter of a national flower, stating that 128, a very large majority of the subordinate Granges, were in favor of the red clover.

At three o'clock the regular order of business was suspended, and Gov. Luce gave an interesting description of his recent trip to California. Various delegates also made addresses.

On Wednesday Worthy Master Thomas Mars delivered his annual address. He reported the order in excellent condition. A considerable portion of the day was given up to the discussion of the question of taxing farm mortgages. The drift of opinion among the delegates was in favor of the California law, which requires the tax receiver to give two receipts, one of them for the portion covered by the mortgages, which may be turned over as part payment of interest on the mortgage.

Secretary Cobb made his annual report at the afternoon session. He stated that the year's receipts in his department were $6,-278 87 and the expenditures $6,382 19. No drafts had been made on the drive-well royalty defense fund, which now reaches $1,622 42 and is drawing interest. Two new Granges had been instituted during the year, but more than that number had become dormant. Eight Granges had been reorganized and two had surrendered their charters. The treasurer's annual report gave the total receipts from all sources as $12,572 40, leaving a balance on hand of $2,570 34. A year ago the Grange instituted a department of women's work, in which the ladies were expected to adorn the lodge rooms, carry flowers and luxuries to the sick, and give sympathy and aid to needy members. The general committee having the department in charge, reported that the work was developing noble results.

At the evening session the new order of Patrons of Industry was discussed. While no objection was made to their organization and objects, and they were wished success, no disposition to combine forces or become working allies was manifested.

On Wednesday the question of the location of the world's fair of 1892 was discussed, and Chicago was unanimously endorsed as the best place to hold it.

Gov. Luce was commended for vetoing the bill repealing the law taxing mortgages.

A resolution favoring the manual training and industrial education idea was discussed by President Clute, of the Agricultural College. A resolution recommending that the secretaries of the County Boards of School Examiners should be elected by the people was reported unfavorably from the committee, and another recommending the substitution of a money tax for the present system of working out highway taxation was voted down.

Ex-Senator Mayor, of Battle Creek, spoke at length on the inter-state commerce law, and endorsed its methods and results.

The executive committee reported that the order was in excellent condition, as were also the books of the Secretary and Treasurer. The membership of the State Grange was now 11,672, a gain of 200 during the year.

The only officers to be elected this year were three members of the executive committee, and Judge J. J. Ramsdell, of Traverse City, J. Q. A. Burrington, of Tuscola, and Erastus N. Bates, of Moline, were selected.

At the evening session the sixth degree was conferred on a number of delegates.

THE CAUSE OF LOW PRICES OF FARM PRODUCTS.

To the Editor of the Michigan Farmer.

In talking with several farmers a few days ago about the low prices of farm products, one said that the agricultural press, and named the MICHIGAN FARMER, dare not give the true cause that had made the decline in value of farm products for the past ten years. He said there was some power behind the agricultural press, unseen by us farmers, that the editors dare not write or kick against. I took an exception to his statement, so I respectfully ask the editor of the MICHIGAN FARMER to print in that paper (from his stand-point) the true cause of the low price of wheat in America and in Europe, while in India wheat has netted the India farmers from one dollar to one dollar and thirty-five cents a bushel; in fact, all through our depression, India wheat has only slightly declined in price. After giving the cause, please give a remedy that will enable us Michigan farmers to sell our wheat for as much per bushel as does the India farmer.

Respectfully,
GEO. A. PETERS.

SCIO, Dec. 9, 1889.

The statement made to friend Peters is sheer humbug. The agricultural press is too numerous, and its editors have such a diversity of views regarding economic questions that the idea they are, or can be, controlled by some hidden power, is nonsense.

As to the price of wheat: It is low because it is plenty. In this respect it is in the same condition as nearly everything grown or manufactured. Another cause of the lower prices this fall was the anxiety of western growers to sell. Probably they were obliged to do this, and it gave buyers an opportunity to demand lower prices.

As to India wheat, our correspondent is under a false impression. It is selling in the English market at a lower, not a higher price, than American or English wheat, because it is of poorer quality and very dirty. The farmers of India, so far as we can get a record of prices, have not received more than half the price—$1.35—given by our correspondent. We can't understand how a farmer there could get $1.35 for his wheat, and the same wheat sell in Liverpool below American grown wheat, which is quoted at about a dollar per bushel.

As for a remedy, the editor candidly admits that it is beyond him. He is in the same position with his own product as the farmer with his wheat. He sells a larger paper, with a supplement, and pays the postage, for $1 per year. He formerly received $2 for a smaller paper without a supplement, and the subscriber paid the postage, then 20 cents per year. We would like some one to give us a remedy for this condition of affairs, but are afraid that so long as there is a big crop of newspapers the price will not go up.

REPLY TO MR. MARHOFF.

To the Editor of the Michigan Farmer.

DEAR SIR:—The last paragraphs in Mr. A. L. Marhoff's article, in your last issue, referring to me, demand a brief reply.

I regret that he has compelled me to introduce him to the readers of the FARMER as one of the misguided young men of the last graduating class, who has followed this writer with a prejudice and partizanship that proved, to say the least, that he had not then learned "that every question has two sides."

I remember he was an interested "spectator" in my class-room with Mr. Crandall (whose expulsion by the Board of Agriculture was the indirect cause of the suspension of some eighteen members of the class of '86), on the morning Mr. C. B. Waldron perpetrated "the classic trick" of bringing in the H_2S. "A fellow feeling makes us wondrous kind."

As to the inventory: It is taken annually, and embraces the stock on hand the last of June. The stock inventory then taken embraced two well bred Shorthorn calves that were not doing first rate; but I did not anticipate serious trouble and they were inventoried at $50 each. They did not improve, however, and I suppose these are the "worthless animals that were killed" some three months after. Perhaps the present administration, with scientific ken, will glance over the year and note the animals that are to sicken and die, and drop them out of the inventory at the beginning.

"Agricultural College sheep registered in the name of the Professor of Agriculture, and many similar things too numerous to mention," has too much of the flavor of students' gossip and tittle-tattle to notice. When any charges of that kind come from any one having the sanction of authority, I shall not be slow to reply.

SAM'L JOHNSON.

LANSING, Dec. 2, 1889.

For the Michigan Farmer.

GRAND BLANC FARMERS' CLUB.

The regular meeting of the Grand Blanc Farmers' Club was held at the residence of C. Clark, Dec. 7th. The meeting was a success; there being 75 present. Pres. Dewey being absent attending the Sheep-Breeders' Association of New York, Mr. B. F. Bush was elected president pro tem. The first paper was presented by Geo. W. Stuart, on "Progressive Farming." He gave some very interesting statistics showing that the farming interests are not in so bad a condition as compared with other interests, that a good farmer is keeping pace with other tradesmen. County Treasurer David Richards was called upon, who is an old pioneer; he compared farming of to-day with when he was a boy; said then muscle was the necessity for farming; now by the improved machinery, brains are more essential; he claimed the hay rake now used is a better buggy than the one used in his boyhood days to take his best girl out pleasure riding. Other papers, one by Will Clark, entitled "Success," and one by John Cook on "Drainage," were read and ably discussed by those present. Miss Ella Carman, of Flint, gave a recitation in elocution, Minnie Clark and Gertie Davidson also gave recitations. Music was furnished by Miss Ella and Mr. Arthur Carman, Mr. John Pierson and Geo. W. Stuart. It was a profitable, interesting meeting and all seemed to enjoy it. The next meeting will be held in two weeks at Davis' Hall, when it is expected that Senator Ball will be present and address the club.

C. CLARK.

For the Michigan Farmer.

THE WEST MICHIGAN FRUIT-GROWERS' SOCIETY.

As the MICHIGAN FARMER has a large circulation among fruit-growers I wish to draw their attention to the annual meeting of the above society to be held at Allegan, on the 17th, 18th and 19th of this month. The programme is certainly an interesting one, and in order to add more particularly to the interest of the meeting several commission merchants of Chicago and Milwaukee are invited to attend, and have promised to comply with the invitation. On Wednesday, the 18th, the questions, "Are Fruit Exchanges a Success?" and "When and How Shall we Market our Fruit?" will come before the meeting for discussion. These are practical questions—questions in which all fruit-growers are interested.

Complaints have been leveled by fruit-growers against commission-men because of their dealings, and commission-men make counter-charges against fruit-growers because of unfair packing of fruit. Now we hope to bring both classes together at this meeting, with the view that a better understanding may be arrived at for the future. And with this end in view let us have a large attendance at the meeting.

The people of Allegan guarantee free entertainment to all who may attend.

J. S. LANNIN, Pres't.

SOUTH HAVEN, Dec. 2, 1889.

The University of Michigan loses another of its best known and most beloved instructors by the death of Prof. Henry S. Frieze, who died on the 7th inst. He had been connected with the University since 1854, giving it 35 years of faithful, efficient service.

DAIRY PREMIUMS FOR SHORTHORNS.

At the annual meeting of the American Shorthorn Breeders' Association the following resolutions were adopted:

Resolved, That Shorthorns contesting for dair prizes shall be pure-bred cows actually giving milk and subject to test. All other classes shall be dropped.

Resolved, That the Secretary be authorized to arrange with the State agricultural societies or fairs of such States as have considerable dairy interests, to pay from the funds of the Association $25 as premiums for Shorthorn class for the production of milk and butter upon the following conditions:

1st. That Shorthorns be permitted by such societies to contest for sweepstake premiums with other dairy breeds.

2d. That no arrangement for these premiums will be made with any society except on condition that actual tests of dairy cattle shall be made on the fair grounds under the personal supervision of proper officers or committees.

3d. That these resolutions and requirements shall be printed in the premium lists of the society accepting the offer.

For cows three years old or over, first prize, $100; second, $50.

For heifers under three years old, first prize, $50; second $25.

This is a move in the right direction, and we are pleased to see the National Association wake up to the necessity of showing how the breed it represents compares with others for the practical purposes of the dairyman. Whether the breed stands or falls in such a contest, the results will be valuable to every farmer and dairyman who is interested in having good dairy cattle. The small margin of profits on the farm compels the selection of that breed of cattle which returns the greatest amount of profit over the food consumed, and theories regarding the value of this or that breed will no longer be accepted. Cold, hard facts are demanded.

STOCK MEETINGS.

MERINO SHEEP BREEDERS.

The following is the programme for the tenth annual meeting of the Michigan Merino Sheep Breeders' Association, to be held at the State Capitol, Lansing:

TUESDAY DEC 17, 1889; 7 P. M.—Report of committee on programme; President's address; report of Secretary; report of Treasurer; paper—"Value of pedigree,"—J. W. Hibbard, Bennington; paper—"What are we looking for?"—O. S. Bristol, Almont.

WEDNESDAY DEC 18 1889; 9 A. M.—Miscellaneous business; election of officers; paper—W. J. G. Dean, Hanover; paper—"Michigan wool; its grading and character,"—Thos. McGraw, Detroit.

WEDNESDAY, 1:30 P. M.—Paper—"What position shall Michigan take on the pending question in regard to wool-growers and woolen manufacturers?"—Robt. Gibbons, Detroit; question box; discussion after each paper.

It is expected that several wool dealers will be present Wednesday and it is desirable to have a large attendance, as much benefit may be derived from discussions and interchange of views.

MICHIGAN STATE SWINE BREEDERS' ASSOCIATION.

The second annual meeting will be held at the State Capitol building, Wednesday, December 18, 1889, commencing at 9 o'clock A. M.

ORDER OF BUSINESS: President's address; Secretary's report; Treasurer's report; motions and resolutions; paper—"Care and management of swine during the winter."—Myron Brown, Wacousta; discussion led by Geo. A. True, Armada.

1:30 P. M.—"Preparation of, and exhibiting swine at fairs,"—L. W. Barnes, Byron; discussion led by G. F. Harrington, Paw Paw; paper—E. C. Rouse, Homer; question box; report of committees; election of officers. Every breeder is invited to be present.

J. W. HIBBARD, Pres., BENNINGTON.
QUINCY McBRIDE, Sec'y, BURTON.

Queries Answered.

LENNON, Mich., Dec. 8, 1889.

Editor of the Michigan Farmer.

Will you please inform us through the columns of your paper whether we have to pay duty on exports to England as well as on imports? Also, whether the United States manufacture enough salt to supply the home demand? We have been having a discussion about these points, but are not decided, and thought we would see if you would explain them, and greatly oblige SUBSCRIBERS.

No duty is levied upon exports. We make sufficient salt, or can, to supply the country, but some is imported because a few consumers yet cling to the idea that American salt is not as good as English.

Stock Notes.

MR. A. A. WOOD, of Saline, has sold to Thomas Barron, of Linden, this State, the bull calf Gentle Duke of Saline, by Fennel Duke of Saline, dam Gentle Annie 30th, a Young Phyllis.

MR. JOHN C. SHARP reports the following sales of Poland-Chinas from the Hillside Farm Herd for fall of 1889:

To John R. Pool, Blackman, one boar.
To G. S. Wilson, Hanover, one boar.
To Albert Case, Summit, one sow.
To Joseph Gunn, Napoleon, one boar and sow.
To E. S. Bean, Spring Arbor, one sow.
To Col. M. Shoemaker, Jackson, one boar.
To Charles Sickrider, Sandstone, one boar.
To Carl Dettman, Leoni, one boar.
To T. B. Smith, Rives Junction, two sows.
To Ferdinand Cox, Liberty, one boar.
To Michael McCann, Summit, one sow.
To E. Ostrander, Rives, one boar.
To Robert Sleight, Summit, one boar.
To M. H. Mills, Summit, one boar.

A. A. WOOD, of Hickory Grove Stock Farm, reports the following sales of Poland-Chinas from his herd:

To H. E. Waddell, Princetown, Illinois, one boar.
To D. F. Smith, Whitmore Lake, one boar.
To W. E. Boyden, Delhi Mills, one sow.
To M. Stierle, Saline, one boar.
To George Mann, Bridgewater, one boar.
To G. Ryer, Bridgewater, one boar.
To F. Duncan, Wordon, one boar.
To J. S. Pacey, Dexter, one sow.
To F. P. Sheeler, Onsted, two sows.
To F. O. Hale, St. Johns, one boar.
To E. D. Hiscock, Dexter, one boar.
To B. Schemmerhorn, Detroit, one boar.

TRANSFERS OF SHEEP.

Recorded in the Michigan M. S. B. Association.

Below find list of sales of sheep recorded in Michigan Merino Sheep-Breeders' Association:

J E Smith to M E Carlton, Canton, ewes J E Smith 147, 162, 168 201, 214, 216, 217, 223, 227, 228, 238, 252, 259, 272, 274, 33 , 33 , 336, 348, 352, 356, 361, 363, 376, 377, 3-6, 524, 528, 532, 537, 550, 561, M K Barbour 130, 131, 136.

E N Bissell, East Shoreham, Vt., to Charles Chapman, Middlebury, Vt., rams E N Bissell 552, 571, 584, 587, 591; to S Gay, Buenos Ayres, S. A., ram E N Bissell 578; to Samuel McCaughey, New South Wales, Australia, ram E N Bissell 579; to W S Brown, Napiar, Utah, ram E N Bissell 597; to S Geloy, Buenos Ayres, S. A., ram E N Bissell 598; to V A Spear, Braintree, Vt., rams E N Bissell 632, 648, 649, 652, 653; to Zurilian Co., Montevideo, Ura, rams E N Bissell 637, 640, 644, and ewes 600, 602, 604, 611, 616, 620 655, 656, 665, 668, 673, 674, 675; to E E Stickney, E. Shoreham, Vt., ram E Sanford 227; to C Cardoza, Buenos Ayres, S. A., ram A A Wood 312; to Thos Ongan, Buenos Ayres, S. A., ram W E Boyden 167; to E F Bowditch, Farmingham, Mass., ewes E N Bissell 522, 614, 615, 625, 657.

L Hume & Son to F J Read, Augusta, ram L Hume & Son 16; to T G Adams Shelbyville, ram L Hume & Son 14; to E H Hussey, Battle Creek, ram L Hume & Son 21.

A A Wood, Saline, to Reynolds & David, Mulvane, Kan., ram 149; to W E Browse, Kendallville Ind., ram A A Wood 506 and ewes 415 and 420; to F C Farnham, Prattville, ram A A Wood 333.

W E Ansterburg to Chas Vannocker, Partello, ram Wm E A 42; to Adelbert Ellick Albion, ram Wm E A 41; to Harvey Juckett, Homer, ram Wm E A 30.

John Chilson to J J Ramsdell, Moscow, ram J Chilson 126.

N E Severance to E C Russell, Mason, ram N E S 18.

John H Snow to James McKinney, Southfield, ram J H Snow 70; to Edwin Millis, Southfield, ram J H Snow 68.

R Hathaway & Son to F C Farnham, Prattville, ewes, R Hathaway 2, 45, 49, 155 162, 164, 196, 244, 248, 381, F H F 214 241, Wm McCauley 8, 91, W G Wilson 89, 109 116, 120, 134, G D Bush 138, J O Hamilton 170, L W S Jr., 101, D K Hall 340, I G Wooster 193.

C S Norris to T G Elliott, Amboy, ram E S Norris 9; to E D Ayres, Pioneer, Ohio, ram C S Norris 19.

S R Crittenden to F C Crittenden, Pittsfield, ram S R C 118.

H L Doane to Henry Hurd, Plymouth, ram H L Doane 246; to Felix McCabe, Green Oak, ram H L Doane 243; to Henry Sharp, Plainfield ram H L Doane 304; to Sam Reynolds, Green Oak, ram H L Doane 249; to L D Lovewell, ewes H L Doane 247 and F & L E Moore 267.

S O Hadley to Wm Randolph, Munith, ram S O Hadley 303; to John S O'Brien, Fitchburg ram S O Hadley 328; to O C Burkhart, Chelsea, ram S O Hadley 333.

A W Bissell to Lister McMillan, Ellwell, ewe S B P & G B R 8.

Buck Bros to Wm Ward, Ionia, ram Buck Bros 5.

S O Hadley to Jacob Call, Munith, ram S O Hadley 310, ewes S O Hadley 425, 4 9, 431, 430, 435, 361, 367 and J B Mead 84.

C A Sessions to E Whipple, Northville, ram C A Sessions 53.

T M Southworth to D Masters, Frontier, ram T M S 265; to John French, Hillsdale, ram T M S 298.

C H Walter to Buck Bros, Portland, ram C H Walter 6.

S G Teeple to Henry Scofield, Perry, ram S G Teeple 41, and ewes S G Teeple 141, 148, 150, 152 to 156, 158 159.

W & E N Ball to E B Welch, Paw Paw, rams W Ball 589, 601, 609, 613, 619, 627, 631, 634; to J M McKee, Ithaca, ram W Ball 602

Thos Leece to John Stitt, Leslie, ram S G Teeple 16.

E. N. BALL, Secretary.

NEWS SUMMARY.

Michigan.

Saginaw County farmers have been plowing this week.

A good deal of Michigan capital is being invested in Kentucky timber.

Grand Rapids can buy forty acres of land for a city park for $15,000. The aldermen are debating whether to buy or not.

The State Grange is in session at Lansing this week, with large attendance, Hon. Thos. Mars, of Berrien Centre, presiding.

The grand jury in Isabella County got after the saloonkeepers, and have scared them into paying $750 in taxes since they begun their investigations.

W. W. Williams, of Eaton County, member of the last Michigan legislature, has been made messenger of the House at Washington, at a salary of $1,200.

Holden Spink, conductor on the G. R. & I., was so terribly injured by an accident to his train, part of which jumped the track, that he died at Tustin, on the 10th.

The Ladies Library Association of Howell is an "institution" of that flourishing town. It has 770 books, 75 of which were added the past year, and 50 names are on the membership roll.

Portland Observer: George W. Rice brought to this market on Thursday last a hog 250 days old which weighed 288 pounds dressed—an average of one and a quarter pounds live weight per day.

The Flint Globe says a car of Kansas corn has already been shipped into that city. It was bought for 20c a bushel in Kansas and sold for 37c in Michigan. The man who grew the corn got 12 cents a bushel for it.

A young man was killed by the cars near Lansing on Sunday, who is supposed to have been Russell Herrington, who disappeared from the Flint School for the Deaf and Dumb some little time ago and had not since been heard from.

A fire occurred in the Finney House, this city, this week, and one of the boarders, B. R. Johnson, was killed in an attempt to escape from the fourth story window. The coroner's jury censured the proprietors for not providing proper fire-escapes.

The State Teachers' Association meet at Lansing on Christmas day. It will resolve itself into two sections, the primary school section and the college section, for one session. The list of speakers indicates that the meeting will be a rare enjoyment to teachers.

Near Omard, Sanilac County, John and Alexander McKeller were working in a sand-pit when it caved in upon them. The bodies were recovered after an hour's hard digging. This happened on the 11th, and on the 12th Alexander was to have been married.

The Caledonian mine at Crystal Falls, Iron County, was drowned out under peculiar conditions, this week. The miners ran a drift under the river, and when a blast was exploded the river burst through and filled the mine. The miners narrowly escaped with their lives.

Two farm hands employed by Alexander Tower, who lives in Delta township, Ingham County, have been arrested, charged with stealing wheat from him, and have confessed they have been robbing him for two years, having taken about 80 bushels of wheat, a gold watch and $50 in cash from the house.

H. J. Edgell, of South Haven, has sold his collection of antiquities to Findley College, O. This was the finest collection of Indian relics in the State, and consisted of 5,000 pieces, some of which were very rare. Mr. Edgell received $1,875 for it. It seems a pity it could not have been secured for the State University.

The Lansing city council has decreed that all lotteries must go. The blow is especially aimed at a "tea-store" doing business on the gift jewelry plan, which has demoralized the trade in tea of the regular grocers and stocked the town with "diamonds," but incidentally the Louisiana lottery and the church "fish pond" get a whirl.

General.

Mrs. Scott Lord, sister of Mrs. Harrison, died at Washington on the 11th.

The names of 51,921 pensioners were added to the pension rolls last year: and the amount needed to pay pensions in 1890 will be $97,210 252.

The English syndicate that gobbled the Minneapolis mills and elevators has taken in some of Duluth's property in that line—about $4,000,000 worth.

St. Louis is to erect a coal palace in which will be established the agricultural and mineral products of Southern Illinois. The palace will be built of coal from Illinois mines.

Senator Morgan, of Alabama, wants to bring about a general emigration of negroes from the Southern States to the free State of Congo, where they can form a government of their own. Another Hayti?

It is said the barbed wire trust has "bust." Half the men in the combine wanted to be president; also, some of the owners of mills in the trust wanted cash for their plants instead of stock, and the company would not give it.

C. O. Ostrom, defaulting cashier of the Minneapolis Pioneer-Press, is charged with setting the fire which destroyed the Tribune building and caused the loss of seven lives. His object was to destroy the books of the company in order to get rid of the testimony against him.

At Johnstown, Pa., on the evening of the 10th, while a large audience had assembled in the opera house, a cry of fire caused a panic which resulted in the death of ten persons. About a dozen more were badly hurt, and over 80 more or less injured. The fire was several blocks away, and the panic resulted from the hurried exit of the first who left the house. There were eight hundred people present.

Mrs. Wilson Waddingham, wife of a Chicago millionaire cattle king, recently obtained a divorce from her husband under rather unusual circumstances. Her husband grew rich and their life more luxurious whereas her tastes were simple. Her protests and his

persistence led to a separation, and an allowance to the wife of $25,000 annually, and now comes separation by the courts. Most of us would be willing to struggle along in a simple, plain way of living on $25,000 a year.

Mexico has refused to recognize Eugene Fechet, of Michigan, as United States consul at Piedras Negras, owing, it is said, to some trouble Mr. Fechet had with the citizens of Paso del Norte when he was consul there, under the last administration. This will probably lead to the recall of Mr. Fechet, as it is quite consistent with diplomatic etiquette for a government to refuse to recognize an unacceptable consul.

The report of the committee appointed to investigate the condition of affairs in the office of Silcott, the defaulting cashier of the Sergeant-at-arms of the House, shows a deficiency of $70,798 and also that the Sergeant-at-arms had been in the habit of discounting the notes of members anticipating their salaries at a rate a little over ten per cent per annum, and putting this discount in his own pocket, though using government funds for the purpose.

It is charged that the American Sugar Co., located at Ashland, Clark Co., Ks., with a sugar mill at Minneola, has been defrauding the farmers. The company asked six townships to each vote $15,000 in bonds for the mill that the sorghum industry might be built up. Samples of the product of the mill were so fine that the farmers thought they had a good thing and voted the required aid, but luckily bonds had not been delivered when the discovery was made that the "sugar" was produced by mixing refined sugar with sorghum syrup and the product palmed off as the product of sorghum cane.

Foreign.

Now Paris has the influenza. There are 670 cases among the employes of the Louvre.

The Shah has ordered his ministers to form a commission to study the criminal laws of other countries, with a view to forming a new code for Persia.

The Russian minister of war has a plan on foot for a canal between the White Sea and Lake Onega, with a port on the Bay of Wyg. It will cost ten million roubles.

Advices from Spain say the government of that country will not listen to any proposition from the United States relative to change of ownership of Cuba, or the formation of a republic.

Robert Browning, the poet, died at London on the 12th 77 years of age. He has been quite a voluminous writer, especially so during the thirty years included between 1850 and 1880, and has published two volumes since the latter date.

NEW ADVERTISEMENTS

5/A HORSE BLANKETS

ARE THE STRONGEST.

NONE GENUINE WITHOUT THE 5/A LABEL

Manuf'd by WM. AYRES & SONS, Philada., who make the famous Horse Brand Baker Blankets.

☞ Mention this paper.

PURE BRONZE TURKEYS,

CHOICE LOT FOR SALE.

For terms address

M. DAVIDSON,
d14-4t Tecumseh, Mich.

FOR SALE,

SHORTHORN BULLS.

Sired by Lord Kirklevington of Erie 44482 15 to 18 months old. These are fine individuals and will be sold cheap.

JOHN P. SANBORN,
d14-3m PORT HURON, MICH.

FOR SALE, CHEAP.

Yearling Shorthorn bull Barrington of Sharon (a Rose of Sharon), and the three year old heifer Maggie Cahill (V. 1, 34), bred in Kentucky by D. A. Gay, a Henrietta. The bull was bred by W. C. Wixom, red in color, and sired by his Barrington bull. For particulars address

EDMUND HAUG,
d14-1m Campau Building, Detroit.

A CHOICE FARM FOR SALE.

The undersigned will offer at public sale on **Tuesday Dec. 17th, 1889**, at one o'clock P.M., at the residence on the farm known as the Linus Clark Farm, situate three miles west and one-half mile north of South Lyons, in the Township of Green Oak, Livingston Co., Mich., a choice farm of nearly one hundred and eighty acres, good buildings and well watered. Terms, one half cash, balance secured on the farm.

ALVAH W. GAGE,
Executor of the Linus Clark estate

Berkshire & Poland China Swine

PORK PRICES

are low this fall and the trade insists upon low prices for breeding stock. Therefore I, Oliver of Flint, will offer for "this month only," a fine bunch of P.-C. boars fit for service at half usual price. P.-C. brood sows at very great sacrifice. Berkshire brood sows and spring of 1889 sows at "not quite pork price—you won't ask me to!" Pigs of all ages at your own price.

I told you early in the season we had no corn where corn ought to grow.

E. P. OLIVER.

FLINT RIVER HERD.

FARM for SALE.

A beautiful farm of 208 acres and no waste land. Five miles from Grand Ledge; one and one-half miles from Wacousta. Good house; horse barn; two grain barns; sheep barn and other sheds and outbuildings. Plenty of good fruit. The soil is gravelly loam. It is watered by wells, spring and Looking Glass River, on the south side of the farm. All improved but about 20 acres. This is one of the best farms in Clinton County for stock or grain. This farm will be sold cheap and on reasonable terms. Perfect title. Call on or address

T. S. SHUART,
n23-2m Wacousta, Clinton, Co., Mich.

NO MORE

DISEASED CATTLE

Dr. Kelly's great germ killer. **Bacillus Annihilator** cures nearly all diseases incident to Horses, Cattle, Sheep and Hogs. A new discovery, which reaches through the circulation, and kills the germs of disease in the system. Prepared on scientific principles and effecting wonderful cures every day. Address **THE KELLY MEDICINE CO., 167 and 169 Washington St., Chicago, Ill.**, or ask your druggist to get it for you. Price $1 per bottle.

Shorthorn Bulls for Sale

A Good Lot to Select From and of Various Families

Choice bred young Shorthorn Bulls, of several families and different ages, for sale at reasonable prices. Catalogue on application. Call and see them or write for particulars.

WM. STEELE,
m9- IONIA, MICH

FOR SALE.

Registered Jersey Bull, two years old,

Bismark of Marshall 19216.

Sire Canon's Landseer 10818; dam Highland Girl 15092. A bargain. Address

E. J. KIRBY,
o26-3m MARSHALL, MICH.

Percheron Horses!

SAVAGE & FARNUM,

ISLAND HOME STOCK FARM,

Grosse Isle, Wayne Co., Mich.,

Importers and breeders of

PERCHERON and FRENCH COACH HORSES.

Our stables are full of the best horses to be found in France. Our prices are low. We sell on easy terms and guarantee our horses breeders. All correspondence promptly answered. Visitors always welcome.

Address letters

SAVAGE & FARNUM,
DETROIT, MICH.

SAVAGE & FARNUM,
Island Home Stock Farm,
GROSSE ISLE, WAYNE CO., MICH.

EUREKA PLACE STOCK FARM!

GREENVILLE, MONTCALM Co., MICH.

J. S. & W. G. CROSBY, PROPRIETORS.

—BREEDERS AND IMPORTERS OF—

Clydesdale, Shire and Cleveland Bay Horses,

AND SHROPSHIRE SHEEP.

Also Breeder of

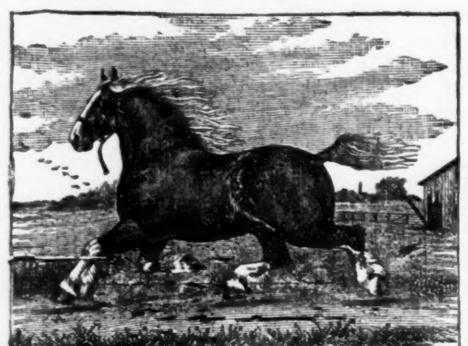
Shorthorn Cattle and Poland-China Hogs.

Forty choice Shropshire Ram Lambs, 12 Imported Rams, and Imported and Home-Bred Ewes for sale. Four Imported Shire Stallions, two Imported Clydesdales and one Imported Cleveland Bay for sale. All registered in both English and American Stud Books.

SHORTHORNS.

A number of yearlings and bull calves for sale. Also stock bull Peri's Oxford 44536. Prompt attention given correspondence.

GALBRAITH BROTHERS,



Still occupy the foremost position as breeders and importers of

CLYDESDALES

And ENGLISH SHIRES.

Seven importations already received in 1889, including many of the choicest specimens and most successful prize winners in Great Britain. The only firm who have during the last year won the *Highest Honors in Both Countries*.

Nearly 200 stallions Now on Hand, including a few choice Suffolks, Hackneys, and Cleveland Bays. Our buying facilities are admitted to be unequalled and every animal in the stud satisfactorily guaranteed. Buyers cannot afford to purchase before seeing our present stock.

GALBRAITH BROS., Janesville, Wis.

Geo. E. Brown,

AURORA, KANE CO., ILL.

CLEVELAND & SHIRE HORSES.

300 Young and Vigorous Stallions and Mares of Choicest Breeding now on hand.

LARGE IMPORTATION RECENTLY ARRIVED.

I will make special prices and liberal terms to parties buying before winter.

200 High-Bred HOLSTEIN-FRIESIAN CATTLE; Deep Milking Strains, at Low Prices.

J. F. SADLER, New York City.
L. L. SADLER, Cincinnati, O.
R. P. LINDSEY, St. Louis, Mo.
W. A. RINEHART, Buffalo, N.Y.

J. F. SADLER & CO.,

LIVE-STOCK COMMISSION.

New York Central Stock Yards. EAST BUFFALO, N. Y.

CLEVELAND BAYS!

HOME of the WINNERS!

We exhibited our horses at Michigan State Fair, Detroit Exposition, and American Horse Show, Chicago, 1889, and

CAME AWAY AHEAD OF EVERYBODY,

winning a total of 40 premiums on 45 exhibits.

Our Stallions and Mares

of all ages are for sale and are guaranteed to be sound, reliable breeders, good disposition, with fine color, style and action.

TERMS MOST FAVORABLE.

Cleveland Bay Horse Company

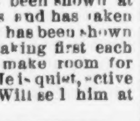
PAW PAW, MICH.

DOOR PRAIRIE LIVE STOCK ASSOCIATION,

IMPORTERS AND BREEDERS OF

Clydesdales and Cleveland Bays,

DOOR VILLAGE, IND.



STYLE, ACTION and QUALITY,
combined with Good Pedigrees.
Importations in June and Oct.
Terms to suit Purchasers.
CALL AND SEE THEM.

CRUICKSHANK BULL FOR SALE.

The prize winning, pure Cruickshank bull Earl of the West 59712. He has been shown at State and county fairs 20 times and has taken 20 first premiums and diplomas; has been shown three times as bull and his get, taking first each time. I desire to sell him to make room for another to use on his heifers. He is quiet, active and sure, with no bad habits. Will sell him at a reasonable price and terms.

JOHN LESSITER.
n2-tf Cole, Oakland Co., Mich.

1889. SUMMIT 1890.

POULTRY FARM,

A large and thoroughly equipped establishment

The breeding of *BARRED PLYMOUTH ROCKS and SILVER WYANDOTTES* a specialty

A very fine stock on hand for fall and winter sales, at reasonable prices. Circulars sent on application. Address

C. F. R. BELLOWS,
o12-6m YPSILANTI, MICH.

Dollars

AND SENSE IN EDUCATION

is a course in the Business, English, Shorthand, Penmanship, Mechanical Drawing, or German and Elocution Departments of the

Detroit Business University,

149 Griswold street, Detroit. Students received any time. Elegant illustrated catalogue free to applicant. s14-3m

CRYSTAL SPRING

STOCK FARM.

REGISTERED

Jersey Cattle

AND

POLAND-CHINA SWINE

combining the highest individual merit and gilt-edge pedigrees; rich cream and butter product the first consideration. Special inducements to buyers for the next 30 days. Write your wants or call and see us.

O. J. BLISS & SON,
Silver Creek, Allegan Co., Mich.

☞ One fare rates by all express companies.

Mound Spring Breeding Farm!

J. W. HIBBARD, - PROPRIETOR,

Bennington, Shiawassee County, Mich.

Registered Berkshire Swine

of improved breeding and unexcelled individuality; my herd having won more prizes at the leading fairs of Michigan in the past four years than any other, having been shown at all of the leading fairs and all stock shown has been bred by me. My breeding stock is composed of such prize winners as Robin Hood Belle 5th 13775, winner of 14 first prizes in four years; Robin Hood Belle 15th 17490, winner of 11 first prizes in three years; Belle of Mound Spring 3d 14718, winner of four first prizes in 1888 and the silver medal given by the American Berkshire Association for the best Berkshire sow in Michigan, and The Dandy 17024, winner of 11 first prizes in three years and silver medal for the best Berkshire boar in Michigan, and many others of equal merit. Stock of both sexes for sale in pairs not akin.

SHORTHORNS.

The following families are represented in our herd: Oxford Vanquish, Young Phyllis, Adelaide, etc.

AMERICAN MERINOS,

Sheep of approved breeding. Individual merit a specialty. Personal inspection invited. Correspondence solicited.

All stock recorded and guaranteed as represented. je13-

LARGE

English Berkshires.

My boars won the highest prizes at the largest fairs in Canada, and at the Tri-State Fair at Toledo, Ohio, in 1887; also first prize and diploma at the Michigan State Fair. In 1888 they won the first prize in class and the diploma for best of any age. At the Wisconsin State Fair they won every first and sweepstakes they were entered for (two firsts and two sweepstakes.) In 1889 at the Michigan State Fair my hogs won every first prize they were showed for and there were five herds in competition, such as J. W. Hibbard's and others. First on yearling boar; first and second on boar under one year; first and third on two year old sows; first, second and third on yearling sows; first and second on sows under one year; and the diploma for the best boar any age. I don't show my hogs at the small fairs, but they have won the highest honors at the largest fairs in the world and they have always had strong competition.

☞ Mention MICHIGAN FARMER when writing.

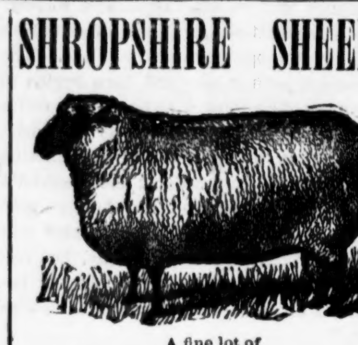
B. N. COOLEY,
o12-tf COLDWATER, MICH.

Plymouth Rock Cockerels

$1.00 each, bred from $10.00 Pitkin cock, and high bred hens. This offer good until January 1st.

E. M. KIES,
n30-3t Reading, Mich.

SHROPSHIRE SHEEP!



A fine lot of

IMPORTED YEARLING

Shropshire Rams!

Just Received from England.

Also 1889 Ram Lambs of my own Breeding,

all the get of the famous imported show ram,

RECTORY HERO (3194),

and all out of superior imported ewes.

JAMES M. TURNER,
Springdale Farm, Lansing, Mich.

SPRINGBROOK FARM

DELHI MILLS, MICH.,

Shorthorn Cattle

—AND—

MERINO SHEEP!

The Shorthorn herd on this farm was never in better shape than at present.

Lord Hilpa 63417 and Imp. Barrington Barringtonia

AT HEAD OF HERD!

Several Choice Young Bulls for Sale,

Ready for Service this spring.

ALSO A FEW CHOICE FEMALES.

MERINO SHEEP.

Flock of over one hundred breeding ewes, yearlings and lambs of both sexes for sale.

☞ Visitors always welcome. If you cannot come and look over the stock write for particulars. Address

W. E. BOYDEN.

SELECT HERD

—OF—

Bates Cattle!

—AT—

HAZEL RIDGE FARM,

SANDWICH, ONT.

The herd consists of

Duchess, Oxford,
Thorndale Rose, Barrington,
Kirklevington, Wild Eyes
and Red Rose Families.

Farm across the Detroit River, immediately opposite the Exposition grounds. Call upon or address

WM. WRIGHT, Proprietor,
35 Fort Street West, Detroit.

☞ Three young bulls, a Thorndale Rose, Barrington and Wild Eyes for sale on reasonable terms. je29-tf

OAK HILL

STOCK FARM,

C. E. LOCKWOOD, - Proprietor.

WASHINGTON, MACOMB CO., MICH.

Clydesdale Horses.

Young Contest No. 6408, Vol. 10, at the head of the stud. The first premium horse at the Michigan State Fair five years in succession.

American Merino Sheep

of Atwood stock descended from flocks of L. P. Clark, Edwin Hammond and W. R. Sanford.

Berkshire Hogs

of the most fashionable families.

All stock recorded or guaranteed as represented. Stock for sale at all times.

C. F. MOORE,

ST. CLAIR, MICH.,

Bates and Bates Topped

SHORTHORNS!

Represented by the following families:

Duchess, Barrington,
Kirklevington, Tea Rose,
Victoria Duchess, Place,
Craggs, Young Mary,
Constance, Moss Rose.

and other high bred sorts. At the head of the herd being the fine Duke bull

GRAND DUKE OF AIRDRIE 62933.

☞ Young stock of both sexes for sale.

OLDFIELD & BINGHAM, Breeders and Shippers of Pure High Class Poultry, Cedar Springs Mich. White Leghorns Rose and Single Comb Brown Leghorns, Black Spanish, Silver and White Wyandottes, Langshans, B. B. R. Game and Black African Ban tams. Twenty prizes won at the Michigan State Fair, Sept 9-18, 1889.

SHORT HORNS

FOR SALE.

Bulls, heifers, cows and calves of choice milking strains and sired by high-bred bulls. For particulars address

B. J. BIDWELL,
my4tf Tecumseh, Mich.

HEREFORDS!

I have a few choice young

Bulls and Heifers for Sale

OF FINE BREEDING.

Prices reasonable. Catalogue furnished on application. Call upon or address

WM. STEELE,
m9-tf IONIA, MICH

Shorthorn Bulls For Sale

Sired by Proud Duke of Fairview 20720, and Lord Barrington Hillhurst 62431, out of Young Mary, Phyllis, Lady Elizabeth, Peri Duchess and Rose of Sharon cows. Also a few cows and heifers. Reliable catalogues always on hand for distribution. WM. CURTIS & SONS, Addison, Lenawee Co., Mich. Addison is on the new Michigan and Ohio Railroad. Farm connected with State Telephone.

DIRECTORY

— OF —

MICHIGAN BREEDERS

CATTLE.—Shorthorns.

AGRICULTURAL COLLEGE FARM, Agricultural College Mich., breeds Shorthorns of the following named families: Victoria Duchess, Kirklevington, Van Metre and Flat Creek Young Mary, Princess, Rose of Sharon and Harriet. Fennel Duke 2nd of Side View 69731 heads the herd. Also Shropshire Sheep and Poland China Swine. Stock for sale. Address PROF. E. DAVENPORT, Supt. of the Farm.

A. J. COOK, Owosso, breeder of Shorthorn Cattle, and Shropshire Sheep. Stock for sale. All stock recorded and of popular families. Write to A. J. Cook, Agricultural College, for prices. o20'85tf

AARON P. BLISS, Swan Creek stock farm, breeder of thoroughbred Shorthorns. Stock for sale. Correspondence solicited and promptly answered. C. S. Baldwin, Manager. P. O. address, Saginaw, Saginaw Co., Mich. au22-26

A. D. DeGARMO, Highland, Oakland Co., breeder of Shorthorn Cattle. Stock farm half a mile north of station. Young stock for sale at reasonable prices. my15-6m*

A. P. COOK, Brooklyn, Jackson Co., breeder of Shorthorn Cattle. Good families represented. Bull Major Craggs at head of herd. Choice young bulls for sale. A221y

ARTHUR ANDERSON, Monteith, Allegan Co., breeder of Shorthorn cattle, established 5 years, with Oxford Count 57326 by Imported Wild Eyes Connaught 34099 at head. Correspondence solicited.

C. E. WAKEMAN, Pontiac, breeder of Short horn cattle, Clydesdale horses, Poland China hogs and Hampshire Down sheep. Stock of each for sale. Correspondence promptly answered. j26-1y

CHARLES FISHBECK, Lakeside Stock Farm, Howell, Livingston Co. Breeder of Shorthorns. Herd headed by Bates bull Baronet. Belle Bates 47411, Belle Duchess, Cambria's Victoria, Stapleton Lass, Selinas and Bright Eye families. Young stock for sale. June8-1y

E. S. BURNETT & SON breeders of Shorthorn cattle. All stock registered. Residence, four and a half miles east of Bancroft, Shiawassee Co. Stock for sale.

FRANK MERRITT, Charlotte, Mich., breeder of highly bred Shorthorn cattle, comprising Kirklevingtons, Waterloos, Roan Duchess and Rose of Sharons, with the highly bred bull Lord Barrington of Erie 4th 70562 at head of herd. For further particulars call on or address as above mch30-1y

F. A. BRADEN, Victoria Stock Farm, Bancroft, Shiawassee Co., breeder of pure bred Shorthorns of the Victoria and Stapleton Lass families. All stock recorded. Young stock of both sexes for sale. Correspondence solicited. j26-

GEO. A. HART, Lakeside Stock Farm, Manistee, Mich., breeder of Shorthorn cattle. Stock for sale. Correspondence solicited and promptly answered.

G. S. ALLEN & SON, breeders of Fine Shorthorn cattle; Lincoln Sheep, and Chester White Swine. P. O. address, Portland, Mich. jly21-6m

H. H. HINDS, Stanton, Montcalm Co., breeder of Shorthorn Cattle and American Merino Sheep. je27-1y*

HENRY BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. d8-1y

JAMES MOORE, Milford, Oakland Co., Mich., breeder of Shorthorn Cattle of leading tribes. Herd headed by Kirklevington 81757. Also Hambletonian and Percheron horses.

JOHN C. SHARP, "Hillside Farm," Jackson. Breeder of Shorthorn cattle and Poland China swine. Families: Peri Duchess, Rose of Sharon, Young Mary, Gwynne, Victorias, etc., with the straight Rose of Sharon bull, "Sharon Duke of Bath No. 64449" at head of herd. Young stock for sale. Correspondence solicited.

JOHN McKAY, Romeo, Macomb Co., breeder of Shorthorn cattle. Young bulls and heifers for sale. Correspondence solicited. je29-tf

M. DAVIDSON Tecumseh, Lenawee County, breeder of Shorthorn Cattle. A few choice young females for sale. Also some young bulls. Correspondence will receive prompt attention. Herd headed by Peri Duke 2d, and consists of Young Mary, Rosabella and Phyllis families.

N. B. HAYES, Eldorado Stock Farm, breeder of Shorthorns of the Young Mary, Phyllis, etc., families. Young animals for sale. Also breeder of Norman Percheron stock with imp. Eldorado at the head of the stud. Correspondence solicited. P. O. address Muir Ionia Co. d11y

O. SNOW & SON, Kalamazoo, breeders of Shorthorn cattle. Principal families: Young Marys, Phillis, etc., headed by the Bates bull Peri Duke 3d 83644. Young stock for sale. Correspondence promptly answered.

S. CHAFFEE, Byron, Shiawassee Co., breeder of Shorthorn cattle, Merino Sheep and Poland China swine. All stock recorded. Stock for sale

S. H. ELLINWOOD, Rose Corners, P. O. address Fentonville, Genesee Co., breeder of Shorthorns. Stock of both sexes for sale. Correspondence will receive prompt attention. n26 26

WILLOW CREEK HERD OF SHORTHORNS. Stock for sale of good families and individual merit; Gwynne, Young Mary and Phyllis. Prices reasonable and to suit the times. O. R. Pattengell, Plymouth, Mich.

W. J. BARTOW, P. O. address East Saginaw, Michigan, breeder of Shorthorn cattle. Stock for sale at reasonable prices. Inspection of the herd and correspondence respectfully invited. o13-1y

WM. BALL, Hamburg, Livingston Co., breeder of Shorthorns. Principal families: Rose of Sharon, Young Mary; Young Phyllis and Cruikshank. Also breeder of thoroughbred American Merinos of the best blood as well as the most thoroughly practical.

W. C. WIXOM, Wixom, Oakland Co., breeder of Shorthorn Cattle of the Kirklevington, Hilpa, Flat Creek Marys, Cruikshank, Rose of Sharon, Aylesby Lady, Phylis, Rosemary, Duchess of Sutherland, Lady Helen, and other families, headed by the pure Bates Barrington bull Barrington Duke 7th No. 72667.

WM. FISHBECK & SON, Howell, breeders of Shorthorn cattle. Principal families: Kirklevington, Darlington, Strawberry and Victoria. Herd headed by the Bates bull 3d Marquis of Longwood (Vol. 35 A. H. B.) Stock for sale. Write for prices.

Jerseys.

SMITH BROS. Eagle, Meadow Brook herd of Jerseys. Stock of the highest quality and of the best strains. Houdan chickens s30-1y

W. J. G. DEAN, Hanover, high-class Jerseys of the Rioter-Alphea and Grand Duke Alexis strains. Pedro Star 11336, son of Pedro 3187, at the head of the herd. Registered Merino Sheep. s3-1y

Galloways.

GEORGE COLEMAN & SONS, Howell, breeders of Galloway cattle. Stock for sale. Correspondence solicited. Visitors met at Howell when requested. s14-89-1y

GALLOWAY BREEDERS' ASSOCIATION of the State of Michigan. President, Thos. Wycoff, Davisburg; Vice-President, L. B. Townsend, Ionia; Secretary and Treasurer, C. T. Wickes, Stanton. Choice recorded stock for sale. Correspondence invited. ja9-1y

Holstein-Friesians.

J. M. STERLING, Monroe, breeder of pure Holstein-Friesian cattle. Stock for sale. Correspondence and personal inspection solicited.

W. K. SEXTON, Howell, importer and breeder of thoroughbred Holstein-Friesian Cattle. Stock farm, three miles south. o13-1y

Devons.

R. G. HART, Lapeer, breeder of Percheron and Standard-bred Trotting horses; Devon Galloway and Hereford cattle; Merino sheep and Cheshire hogs. All stock registered. Farm adjoining city limits; residence, and breeding and sale stables in the city. Come or write me.

HORSES.

WATKINS STOCK FARM, Birmingham, Mich. Shetland Ponies, Exmoor Ponies. High class Jersey cattle. Holstein cattle. Small Yorkshire swine. Stock for sale. Address G. A. WATKINS, 18 McGraw Building, Detroit, Mich. o5-3m

SHEEP.—Merinos.

A. A. WOOD, Saline, breeder of thoroughbred Merino sheep. A large stock always on hand. Also Poland-China hogs; herd started from those of B. G. Buel, of Little Prairie Ronde, and G. F. Harrington, of Paw Paw.

CHARLES BEAHAN, Palo, breeder of registered Merino sheep and registered Poland-China swine. Stock for sale at reasonable prices. s14-3m

E. BURLINGAME & SON, Byron, Shiawassee Co., breeders of registered Merino sheep of rich blood; also Shorthorn cattle. Stock for sale. Correspondence invited.

F. M. DEAN, Maple Avenue Stock Farm, Pawamo, Ionia Co., breeder and dealer in improved American Merinos. All stock registered and descended from Vermont flocks. Also registered Poland-China swine. Stock for sale. Correspondence solicited.

GEO. W. STUART & SON, Grand Blanc, breeders of pure Clark and other families of Atwood Merinos. Rams in use, Luck 427, Deacon Jr., (G. W. S. 403), and Luman Jr., (G. W. S. 364.) Also imported and grade Percheron horses and Poland China hogs.

J. S. WOOD, Saline, Washtenaw Co., breeder of Vermont and Michigan registered thoroughbred Merino sheep. Stock for sale.

J. EVANS SMITH, Ypsilanti, breeder of thoroughbred Merino sheep, registered in Vermont register. Rams and ewes for sale of my own breeding, together with recent selections from some of the best flocks in Vt. Examine before purchasing elsewhere.

R. W. MILLS, Maple Ave. Stock Farm Saline, Washtenaw Co., breeder of Vermont registered thoroughbred sheep. Atwood ram Peerless at head of flock. Also breeder of Poland China swine. Correspondence solicited.

R. HATHAWAY, Addison, Lenawee Co., Mich. Breeder of thoroughbred American Merino sheep, registered in Vermont and Michigan Registers. Rams and ewes for sale of my own breeding, together with selections from some of the best flocks in Vermont. Correspondence solicited.

SHORT & HARRINGTON, breeders of Merino sheep and Poland-China swine. All breeding stock recorded. Correspondence solicited. Address A. T. Short, Coldwater, Mich., or G. F. Harrington, Paw Paw, Mich. Rams sired by Diamond for sale—yearlings, two and three years old.

Shropshire Sheep.

A FLOCK SECOND TO NONE—Cheap as the cheapest, quality considered. All stock registered. Imp. ram Michigan at the head. Address E. D. Sabin, Hudson, Mich.

AFTER my return from England about Aug. 25, I can suit all buyers on Shropshire Rams suitable in quality and breeding to head the finest flocks of America always. See the 300 I can show before buying. Meet all parties at any train. Correspondents have personal attention. C. S. BINGHAM, Vernon, Mich.

A WORD TO YOU. I will continue to furnish the best Shropshires to be had, as low as they can be bought. Free delivery to any point in Michigan.
jly21-88 W. J. GARLOCK, Howell, Mich.

GEO. W. BUTTON, Flushing, Mich., breeder of Shropshire sheep from imported stock. Ram Chief, bred by Minton, of England, at head of my flock. Some choice rams and a few ewes for sale. Stock registered. Inspection invited. s1-1y

GAVIN LONGMUIR, Bannockburn Stock Farm, Pontiac, Mich., Importer and Breeder of Registered Shropshire Sheep. Stock for sale. Write for particulars. f13-1y

HENRY LESSITER, Grattan, Kent Co., breeder of pure unregistered Shropshire sheep and Shorthorn cattle. Correspondence solicited. o6-6m

H. H. HAWLEY, Vernon, Shiawassee Co., breeder of registered Shropshire sheep. Stock either imported or bred from imported sheep. A few good rams and ewes for sale.

J. CORBITT, Ionia, breeder of first-class Shropshire sheep of registered stock. A few ram lambs from Buffalo Bill at reduced rates for farmers to improve their flocks. Also a few yearlings. s29-1y

J. F. RUNDEL, Birmingham, Oakland Co., Importer, breeder and dealer in thoroughbred Shropshire sheep. Stock registered. I import my sheep direct from England. Correspondence promptly answered.

J. LESSITER, Cole, Oakland Co., breeder of Shropshire Down Sheep, registered and unregistered; also Shorthorn Cattle. Stock for sale at reasonable prices and terms.

L. S. DUNHAM,
Breeder and Importer of
Shropshire Sheep,
Concord Mich.

LARGEST flock in Southern Michigan. Blue Blood 2d at head of flock; sheared 17¼ lbs. of wool; weight, 275 lbs. at two years old. Reduced rates by express.

MONTAGUE BROS., Chubbs Corners, importers, breeders and dealers in Shropshire sheep. Stock for sale at all times. Inspection of stock and correspondence solicited.

ROBERT R. SMITH, Howell, breeder of and dealer in registered Shropshire sheep. Stock always for sale. Terms to suit customers.

S. W. RANDALL, East Kendall, N. Y., breeder of registered Shropshire sheep. Rams for sale from imported stock. jly5-6m

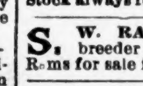
T. A. BIXBY, Lake View Stock Farm, South Haven, breeder of Shropshire Sheep from imported stock. All registered. Largest flock in Western Michigan. Inspection invited. f16-1y

VALENTINE BROTHERS, Dexter, Washtenaw Co., dealers in imported and breeders of registered and unregistered Shropshire sheep. Stock always for sale at reasonable prices. Correspondence solicited. may 25-1y

HOGS.—Poland-Chinas.

A. O. BOWEN, Wixom, breeder of pure-bred Poland-China swine. All breeders recorded in Ohio P. C. Record. Choice stock for sale.

C. A. LIMBECK, Dowagiac, Mich., breeder of pure bred Poland-Chinas. Herd took first prize in each class competing for, also sweepstakes at Michigan State Fair, 1888. Recorded in Ohio P. C. R. Pigs not akin for sale.



C. W. Jones, Richland, Mich.
My breeding stock all recorded in both the Ohio and American Poland-China Records.

GEO. I. STRACHAN, Palo, Mich., breeder of registered Poland-China swine. Inspection invited. Correspondence solicited. Special rates by express. s21-6m

GREENWOOD STOCK FARM. Poland-China swine a specialty. Breeding stock recorded in Ohio P. C. Record. Correspondence and inspection invited. B. G. BUELL, Little Prairie Ronde, Cass Co., Mich. s14-89-1y

G. W. INMAN, Ypsilanti, Washtenaw Co. breeder of Poland-Chinas of the most popular strains. Some superior young pigs for sale. Also Merino sheep. All stock bred from recorded animals. Correspondence solicited.

H. W. RILEY, Greenville, Mich., breeder of Poland-China and Victoria swine. Stock for sale. d14-89

H. L. ALLEN, Palo, Mich., breeder of registered Poland-China swine. Young stock for sale from prize winners at the State Fair. Special rates by express. Write for prices.

H. WILL GREEN, Pontiac, Oakland Co., breeder of Registered Poland-China swine. Stock for sale. Breeding pens, two miles south of Orchard Lake R. R. station. Correspondence will receive prompt attention. je29-1y

L. F. CONRAD, Wacousta, Mich., breeder of registered Poland-China swine. Young stock for sale. Prices reasonable. Write for terms. o5-6m

ROBERT NEVE, Spring Water Stock Farm, Pierson, Montcalm Co., breeder of registered Poland-China swine and high class poultry. Write for prices. o5-3m

NEIL FRANCIS, Oakwood, Oakland Co., breeder of Poland-China swine of the most fashionable strains. Correspondence solicited.

T. G. ADAMS, Shelbyville, Mich., breeder of first-class registered Poland-China swine. Won highest laurels at Grand Rapids Fair. Write for prices. o5-3m

TRUE BROTHERS, Armada, Macomb Co. breeders of Poland-China swine. Breeding stock all of choice families. All stock recorded Write for prices. f25-1y

UNION HERD Pure Poland-China Swine, headed by Tecumseh 2d 6055, and assisted by Zach 4495. A choice lot of pigs for sale. Will breed and sell a few young sows to our young boar Brigham, bred by C. M. Brigham, Hebron, Ill. Sire, Prince Tom 18845; dam Mignon 5th 25088 American Record. Stock recorded in Ohio Record. Special rates by express. Henry M. Morse, Union City, Mich.

Berkshires & Suffolks.

DARWIN FOSTER, Grand Ledge, Mich., breeder of large English Berkshire hogs. Breeding stock recorded. Correspondence solicited. s21-3m

GEO. S. MARCY, Portland, breeder of first class registered Berkshire Swine and thoroughbred Merino Sheep. Stock for sale.

W. W. TUBBS, Delhi Mills, Washtenaw Co., breeder of pure Suffolk Swine. Choice stock for sale. Correspondence promptly answered.

Chester-Whites.

A. H. WARREN Ovid, breeder of improved Chester White swine. All stock eligible to registry. Stock for sale at reasonable prices. Correspondence solicited. a17-89-6m

FRANK KALEY, Portland, breeder of choicest strains of Chester-White swine. Stock for sale. Write for prices. s14-3m

Wolverine Stock Farm!

AMOS PARMENTER, Prop.,

American Merino Sheep and Poland-China Swine.

VERNON, - - MICH.

I began breeding Poland-China swine in 1835. My purchases have all been from the herd of L. W. & O. Barnes and of their breeding, except the boar Black Success, bred by E. J. Klever. I have now for sale some extra pigs from Barnes' Luck, Luck Again, and Black Success. Pigs not akin. je15-tf

E. W. KNAPP,

GALESBURG, MICH.

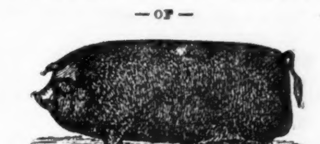
BREEDER OF

VICTORIA SWINE.

All breeding stock recorded in both Michigan and Indiana records. Young stock for sale. Pedigrees furnished. Write for prices.

SPRING VALLEY HERD

— OF —



POLAND-CHINAS

G. W. INMAN, Proprietor,

YPSILANTI, MICH.

I have extra good young boars and sows, all sired by the boar Star of the West 15703, which has proved an extra sure stock hog. He was sired by the noted boar Lawrence's Hoosier Tom 3993, Ohio Record, and which I have recently sold to head the herd of B. O. Williams, Prospect, Marion Co., Ohio. The pigs I offer are large and growthy, in good shape for business, and out of an extra good lot of sows. They will be sold at *very reasonable prices*. Write at once for particulars.

I have also two young Shorthorn bulls for sale fit for service. One sired by Fennel Duke of Sideview 2d, at the head of the Agricultural College herd, and the other by my bull Duke Royal.

Also a few good yearling Merino rams, unregistered but well bred and heavy shearers. I sheared from 87 sheep last spring 1,259 lbs. of wool.

☞ Inquiries will receive prompt attention.

L. W. & O. BARNES,

— PROPRIETORS OF —

"LAKE VIEW" STOCK FARM,

Byron, Shiawassee Co., Mich.

Breeders of pure bred Poland-China swine and registered Merino sheep. Swine recorded in O. P. C. Record. Our herd is one of the finest and best bred herds in the State, and has taken more premiums at the Michigan State Fair in the past five years than any other herd. We breed only from animals of fine quality, as well as gilt-edged pedigrees. We have now for sale a superior lot of young boars and sows, dark in color and of fine quality. Prices reasonable. Write, or come and see us. Special rates by express.

LOOK HERE!

The Brookside Stock Farm

is where you will find as good Poland China swine, Shropshire sheep and Bronze turkeys as can be found anywhere. Pedigrees furnished with all sales. Prices low. Write your wants or come and see us.

E. P. ELY & SON,
n2 6m NILES, MICH.

WE, Todd Improved Chesters have been crowned King in the Show Ring

On the farm with us may be seen a very fine flock of Shropshire sheep. For circular containing full particulars address S. H. TODD, Wakeman, O

Hickory Grove Herd of Poland-Chinas.

YOUNG STOCK for SALE

OF BOTH SEXES.

Pairs not akin can be furnished. Also some choice young boars. Stock all from the most popular families, and prices very reasonable. Address

A. A. WOOD,
o5-tf SALINE, MICH.

Kersley Herd of Poland-Chinas.

PIGS FOR SALE

of both sexes, not akin.

The dams are from S. E. Shellenberger & Co., Ohio; J. W. Williams, Indiana; Brink Bros., Ohio; and Levi Arnold, Mich. Sires: Genesee No. 1 439; Silver King 15021, and King's Magnate 14787; Ohio Record; and from S. E. Shellenberger & Co. A nice lot of pigs. Prices reasonable. Address

C. H. ROCKWOOD,
o19-2m Flint, Genesee Co., Mich.

FOR SALE.

Forty Shropshire ewes; twenty registered and twenty unregistered; also Shropshire rams. All at reasonable prices and terms.

JOHN LESSITER,
a17-tf Cole, Oakland Co., Mich

J. A. MANN, Kalamazoo, Mich.

LIVE STOCK & REAL ESTATE AUCTIONEER

Sales made in any parts of United States or Canada. Terms reasonable and made known on application.

C. M. THORNTON, Northville, Mich., live stock and general auctioneer. Sales made in any part of the country at reasonable rates. Good references.

Poetry.

THE VOLUNTEER ORGANIST.

The gret big church was crowded full uv broad-cloth and uv silk,
An' satins rich as cream thet grows on our o'l brindle's milk;
Shined boots, biled shirts, stiff dickeys, an' stovepipe hats were there,
An' doods 'ith trouserloons so tight they couldn't kneel down in prayer

The elder in his poolpit high, said, as he slowly riz:
"Our organist is kep' to hum, laid up 'ith rooomatiz,
An' as we hev no substitoot, as Brother Moore ain't here,
Will some 'un in the congergation be so kind's to volunteer?"

An' then a red-nosed, drunken tramp of low-toned rowdy style
Give an interjuctory hiccup, an' then staggered up the aisle.
Then thro' thet holy atmosphere there crep' a sense or sin,
An' thro' thet air of sanctity the odor uv ol' gin.

Then Deacon Purlington he yelled, his teeth all sot on edge:
"This man purfanes the house er God! W'y this is sacrilege!"
The tramp didn't hear a word he said, but slouched 'ith stumblin feet,
An' sprawled an' staggered up the steps, and gained the organ seat.

He then went pawin' thro' the keys, an' soon there rose a strain
Thet seemed to jest bulge out the heart, an' 'lectrify the brain:
An' then he slapped down on the thing 'ith hands an' head an' knees,
He slam-dashed his hull body down kerflop upon the keys.

The organ roared, the music flood went sweepin' high an' dry,
It swelled into the rafters and bulged out into the sky:
The ol' church shook an' staggered, an' seemed to reel an' sway,
An' the elder shouted "Glory!" an' I yelled out "Hooray!"

An' then he tried a tender strain that melted in our ears,
Thet brought up blessed memories an' drenched 'em down 'ith tears;
An' we dreamed of ol' time kitchens, 'ith Tabby on the mat,
Uv home an' luv an' baby days, an' mother an' all that!

An' then he struck a streak uv hope—a song from souls forgiven—
Thet burst from prison bars uv sin, an' stormed the gates of Heaven;
The mornin' stars they sung together—no soul was left alone—
We felt the universe waz safe, an' God wuz on his throne!

An' then a wail uv deep despair an' darkness come again,
An' long, black crape hung on the doors uv all the homes of men;
No luv, no light, no joy, no hope, no songs uv glad delight,
An' then—the tramp he staggered down an' reeled into the night!

But we knew he'd tol' his story, though he never spoke a word,
An' it wuz the saddest story that our ears had ever heard;
He hed tol' his own life history, an' no eye wuz dry thet day,
W'en the elder rose an' simply said: "My brethren, let us pray."

—*F. W. Foss, in the Yankee Blade.*

OLD FOLKS.

Ah, don't be sorrowful, darling,
And don't be sorrowful, pray;
Taking the year together, my dear,
There isn't more night than day.

'Tis wintery weather, my darling,
Time's waves they heavily run,
But taking the year together, my dear,
There isn't more cloud than sun.

We have had our May, my darling,
Had our roses long ago,
And the time of the year has come, my dear,
For the silent night and snow.

And God is God, my darling,
Of night as well as day,
And we feel and know that we must go
Wherever He leads the way.

Aye, God of the night, my darling,
Of the night of death so grim;
The gate that leads out of life, good wife,
Is the gate that leads to Him.

Miscellaneous.

A DIVORCE CASE.

Edward Walston sauntered into the office to see if there was any extra assignment for the evening. He had been directed to report the meeting of the Society for Supplying Overcoats to the Hottentots, but as that would doubtless be brief, he could easily attend to something else. Quite unaccountably a vague idea had entered his mind that his services would be needed.

In this he was not disappointed. On his desk lay a note from the city editor. He opened it, and read as follows:

MY DEAR MR. WALSTON—There are rumors that Mrs. Henry Doncaster, of 146 Blank avenue, will bring suit against her husband for divorce. I got the hint from Somotes, the lawyer. Both parties, you know, stand high in society, and we can use all you can get of the case. C. B. W.

P. N. B.—Never mind the Hottentot society charity business.

Walson softly whistled a note of astonishment as he read the words. He re-read it and whistled again. Then he sat down, knitted his brow, and gazed quite steadily at the ink bottle in front of him. "Shall I go or shall I not?" he asked, but the ink bottle did not answer. He repeated the question, but the ink bottle was as dumb as ever. Suddenly he grabbed a pen, and the ink bottle grew more communicative. This is what it began to say:

DEAR MR. W.—I'm very sorry, but certain social connections make it impossible for me to attend to that case——

Here the ink ceased to flow. Walston stopped writing, grabbed the sheet of paper and tore it up.

"No," he said, "I'll go. Better 1 than a stranger."

He put on his hat and left the room. A tall, well formed, solid-looking, self-reliant fellow he was, and he made a striking figure as he passed down the street. Several acquaintances bowed, but he returned their greetings formally and somewhat coldly, and walked along as if his mind was not with the crowd. It wasn't. It was occupied with the case that had been so suddenly thrust upon his attention.

It was a strange situation for any man, but it was only one of the many curious experiences that make a newspaper career so full of interest and so barren of monotony. There is no vocation that has in it as many contrasts. All kinds of people are met; all shades of crime and virtue, all phases of human nature and human character, come within the range of a reporter's observation. He sees the smallness and the bigness of life, the sunlight and the shadow, the humility and the vanity. To-day in politics, to-morrow at church; in the morning at a funeral, in the afternoon at a wedding, in the evening at the theatre, with its light and mimicry. And so the round goes, from life and laughter to sorrow and the grave, from death or divorce to the music of gay throngs and the joy of happy anniversaries.

At first his sympathies respond to the circumstances, but as the days and weeks and months and years bring their succession of events, there comes a hardening of the susceptibilities, and the reporter begins to look upon his work as the surgeon does upon his profession—he has no right to feel, only to see and do. He must dissect and describe, but not sympathize. Coolness is what he needs, not emotion. And yet all the stolidity in the world does not avail when scandal touches those who are near to him. He is one of the most sensitive persons in the world, with a wholesome horror of the newspaper notoriety that he helps to manufacture, and a keen contempt for those who like it. Walston was such a man. If he had been sent to report a case in which he had no personal acquaintance, he would have done his work with his usual unconcern; he would have gotten the facts, and written them up for all they were worth.

But this affair was different. He knew Henry Doncaster and Margaret Doncaster. Mrs. Doncaster was his cousin. Mr. Doncaster had been his room mate at college for four years. The Walston home was then one of the pleasantest places in the state. It had a famed hospitality. Here he and Henry spent a large part of their vacations. Here Margaret visited the Walston family. Here the courtship began. Edward saw and aided its progress, and enjoyed its consummation by acting as best man and practically superintending the whole wedding; "for," they said to him, "unless you are in it, we shall not feel that we are quite married." In a month their path and his path had diverged, and all the old days were as a memory that glowed brightly in the evening of bachelor meditation, but vanished when the day came on with the care and competition of business. And now that memory was to be blurred by a divorce. It was really too bad, and something must be done to head it off, or at least to soften the notoriety that a sensational publication would cause.

Within a half hour after he left the office he was on the doorstep of a big brown stone house. He rang the bell. The man who opened it was evidently an old family servant, for a look of real pleasure beamed in his face when he saw who the visitor was.

"James, how are you?"

"Why, Master Edward, when did you get back to the city?"

"Oh, a week or so ago. Are the folks at home?"

"Y-e-s, s-i-r," said James, slowly, as his face lightened into an expression of decided uneasiness.

"Well, I want to see them."

"I'll tell them, sir; but I'm afraid"—

"Never mind that. I know. But I must see them both. Here are two cards. Take one to each without letting the other know of it. Tell Mr. Doncaster first, and then Mrs. Doncaster. You understand?"

"Yes, sir."

"Then be sure you do it correctly."

Walston sank into a chair and gazed quietly upon the elegant surroundings. He did not notice much, however, for he was thinking out something to say. It was a delicate position, very delicate, and all his trained diplomacy was necessary for the work before him.

Steps were heard, and a second afterward a tall, handsomely dressed man entered the room. They clasped hands, and fired questions at each other in rapid succession. Walston could see that beneath Doncaster's cordiality was a deep sorrow, and he observed in his face undoubted traces of dissipation.

"You've been back a month, you say. Queer I haven't seen you."

"Are you sure you haven't?" asked Walston.

"Perfectly. But why do you ask the question?"

"Because I have seen you."

"Where?"

"At——Why, Margaret, how do you do?"

The woman who entered the room was fitted to attract attention. She was beautiful; no doubt of that. She carried herself perfectly. She was dressed in faultless taste. Her face had magnetism and loveliness. She was older, more stylish, more womanly and more self-possessed than when Edward had last seen her. He arose to greet her with his old time cordiality. She gave him a charming smile of welcome, but suddenly she saw her husband. The smile partly faded away; she trembled a little, but in an instant her social training had asserted its power, and she was herself again. Mr. Doncaster had arisen with the unmistakable purpose of finding an excuse which would get him out of the room. Walston saw it, and arose fully to the situation. He quietly but deliberately closed the door.

"Now, sit right down, both of you," he said, as if he were the host and they the visitors, "and let us have a good old time chat."

He looked at each, saw Margaret gazing sideways at the window, saw Henry studying the carpet. He took a chair near the door and between the husband and wife, but far enough back to get a view of them.

"It's a positive pleasure to see you again," he said, with cordiality. "Ever since I was best man at the wedding I have felt as if I were a member of the family, and when I look around your beautiful home and think of my hotel life, I feel like putting my household goods in a pushcart and moving in."

"I thought you were out west," said Mrs. Doncaster.

"So I was. You remember that after I left college, and a few months after your marriage, father died. My share of the property was some $25,000. I took it and went to a western city to fill a long felt want. I flatter myself that I filled it. I poured all the $25,000 into it, and then used the rest of the space as a grave for the newspaper. The sheriff officiated, and various creditors acted as mourners."

"When did you come east?"

"About a month ago. I fully intended to call, but you know I had been away five years, and had outgrown my society habits. Then it was necessary that I should bend all my energies to work, for while some of those creditors cheated me most abominably, I can't rest contented until all I owe is paid."

"What are you doing?" asked Doncaster.

"I am a reporter on *The Comet*. And that is why I called this evening."

This aroused Doncaster, who until now had been politely indifferent. He quit studying the carpet, glanced rapidly at Walston and seemed to suspect the cause of the visit. Margaret took a quick view at her cousin, but he was as a matter of fact looking as if he had merely made a remark on the state of the weather.

"Explain yourself," said Doncaster, not without a little uneasiness.

"Certainly. A report reached our office to-night that you two were going to figure in a divorce sensation. The idea was preposterous, but to save you from being bothered by a stranger I came myself to get your denials. The rumor was false, of course?"

"I have nothing to say," said Doncaster after a pause.

Walston turned to the wife.

"Margaret, tell me, is this true?"

"I prefer to say nothing."

"Then it is true."

A pause and a sigh.

"Who would have thought of it? What a world this is, and what changed creatures we are! To think that you two—the best and most devoted lovers in the world—should take such a step. The horror of it reconciles me to my bachelorhood, but it makes me shudder in spite of myself."

"I think," said Doncaster, with dignity, "that it would be in better taste not to discuss the matter here."

"Henry, I don't agree with you. We grew up together. I've known you both, and been a friend to each of you since childhood. I expect to be the same now. Much—I may say almost everything—depends upon how this case is presented to the public. In journalism a first impression is worth a dozen supplementary reports. I want you both to talk this matter over with me. Margaret, you have retained Smootes, haven't you."

She had been gazing with unbroken steadiness at the window, but this sudden question was a little too much for her composure. She turned to Walston, began to speak, closed her lips again, blushed unmistakably, and finally stammered, "Not yet, but I may."

"A capital selection. He is so unscrupulous, yet so ingenious. In one sentence he will prove you a paragon of sweetness and light; in the next he will picture you as an abused, degraded wife."

She moved again, but the blushes did not increase. A firmness of the lips showed that she was conquering her feelings. The color left her cheeks, and she looked at Walston full face, and raised her eyebrows as if in doubtful surprise. Henry resumed his study in carpets.

"It will be a very cheerful scene," pursued Walston. "You will be the heroine. It is always so in a divorce case. Sympathy goes with the wife. She can sit dumbly, and the spectators will swear that she is an angel. The jurymen feed on her smiles and her sighs, softening with pity and glowing with admiration. Yes, Margaret, the city will talk about you; your portrait will adorn sensational papers, and you will be able to join in the great work of elevating the stage. But Henry! Ah! Henry, old fellow, you are in for it sure enough! In a divorce case a husband is always guilty until proven innocent. The guilt clings no matter how you act. If you smile, the people will call you a hardened villain. If you frown, they will pronounce you a dangerous brute. If you preserve an air of gentlemanly indifference, they will consider you a cold-souled scoundrel. Every change of countenance will be a witness against you. Every shift of attitude will be an added damnation to your cause. The husband in a divorce suit is the same old story of the western horse thief—he acts guilty, even if he is innocent, and he ought to be hung anyhow. Old fellow, I pity you; I do, indeed!"

"Thank you," said Doncaster, coolly, "But I must protest against discussing this affair here."

"And I must insist."

If it was Walston's intention to make his friends miserable, he could not have better succeeded. Henry seemed to stand it stolidly enough, but Margaret was evidently uneasy. Both devoutly wished that Walston had remained out west. But he was obdurate.

"Please remember," he went on, "that more interests than yours are at stake. You both come of good families—families that have lived honorably and proudly for years without the taint of scandal. This thing to them will be a blow of unspeakable anguish, and it is our duty to make that blow as soft as we can. Much will depend, as I said, upon the first statement of the case, and upon the scope of the evidence. Don't go too deep in the mud. It is not necessary under our accommodating divorce laws. This thing is bad enough. Don't make it any worse, for at its best it will put a shadow on both your lives. Margaret, you will be a heroine for a few days, but it will not last. To a woman's character too much publicity is like to much sunshine on a photographer's negative—it blurs and ruins it. And as for you, Henry, I know the experience will have a dangerous effect. I feel that it will make you both a great deal more miserable than you are, after all the romance and beauty of your love. But I beg pardon for talking so much. I'm taking up time. Let's get to business. I want you both to explain yourselves, and then I will suggest how it shall be published; and in this way we shall make the least scandalous showing to the public. It may protect you both. Now, Henry."

"Look here, Edward; I object to this thing."

"The objection is overruled. Tell me, frankly, what is the cause."

"I prefer not."

"So would I; but it is for your own and your family's protection."

There was an uncomfortable silence. Henry arose, walked up the room, and then back again. Presently he found his speech, and it came out by starts and quits, as if he wanted to say something, and yet to say as little as possible.

"My statement," he began, "shall be brief. A happy couple come into possession of money and go into fashionable society. The wife receives a great deal of attention from men the husband does not like. The husband objects in vain and then begins to drown his objections in alcohol. He drifts into a rapid set, and he and his wife drift apart. Each is proud, and each maintains a stand. The gulf widens; the husband's dissipation increases. He finally gets drunk, gets into a fight, gets arrested and disgraces himself and his family, but fortunately escapes newspaper notoriety because his name isn't recognized in the police court."

"Well, that's pretty bad. Now, Margaret, what have you to say?"

Now it was Margaret's time to arise. She went to the window and looked at vacancy through the lace curtain. When she answered, she was calmer than her husband had been.

"I have little to add to what you have heard. We have been drifting apart until separation will be the best for both. I am tired of insane jealousy, tired of being accused of things of which I never was guilty. I have stood the nightly desertion as heroically as I could, but when there comes the disgrace of a street fight in the company of notorious men, and with the night spent in jail, I most emphatically object."

Walston sighed. The clock on the mantel ticked industriously; otherwise the room was depressingly quiet.

"Of course, all your old love for each other is dead?" was the next question.

It came suddenly. Neither was prepared for it. Henry flushed with anger. Margaret grew whiter and more nervous. They now wished he was buried in that western grave with his newspaper.

"I beg pardon for asking such a question. Each of you is too polite to answer it. Well, I'll answer it for you. Of course it is dead; buried deep in that gulf which now separates you."

Doncaster arose. He looked at Edward with no disguised wrath and spoke with undoubted sarcasm. "If your cross-examination is over," he said, "you will please excuse me until the trial is regularly called."

"Certainly not," replied Walston. "Why, great Jupiter, man, we haven't begun yet! You haven't given me any facts at all. Your general statements—both of them—are not worth the breath that it took to say them. I must have instances, dates, charges and all the other details. Who are the co-respondents?"

"The co-respondents?" repeated Margaret, aghast, and ghastly.

"Yes, the co-respondents? That is only one of the details. You must give them all to me. We want two columns about the case for to-morrow's paper."

"Two columns?" said Margaret, with a gasp, as she grabbed the arm of the chair for support.

"Yes, two columns, and more if we can get it—all on the first page, in large type and with a display head."

The thought was too much for Margaret. She lost her speech in the horror of the thought. Henry took a rapid excursion up the room.

"Edward," he demanded as he came back, "can't this thing be kept out? I'll pay you—the newspaper—anybody for it."

"Yes, can't it be kept out?" added Margaret, with a plaintiveness that would have touched any heart but Walston's.

"Of course it can't. And what if it could? It would be ten times worse when the papers were filed in court, for it would set a man from every office searching for scandals about you both." He was piling it on at the sacrifice of some truth. "Now look here," he continued, "why don't you act sensibly? If you are going into this notoriety, you'd just as well prepare to face the music. You must begin by getting rid of your emotional ideas. You must chloroform your nerves, put ice water in your veins, and dismiss all your preconceived notions of delicacy. I advise you to begin now. Compose yourselves and collect your facts while I go to my overcoat for my note book."

Henry and Margaret were entirely too confounded to reply at once. He was angry beyond measure. She was as pale as the lace curtain to which she was clinging. Both devoutly wished that Walston was in that grave. He, however, while calm as a corpse, was otherwise quite alive, and was walking toward the door.

"Two columns—co-respondents—" Margaret began to mutter.

Henry found his speech in some soul-felt words that referred to newspapers, and hoped for their extermination.

Walston partly opened the door. Then he paused, and finally closed it again.

"This thing is sad for us all," he said, returning to his chair. "I feel it as keenly as you do. Let us rest a minute or two. We can talk better afterward, and I know an experience of life that may help us along a little. Sit down, Margaret, and I will tell it to you. I won't keep you long."

She obediently took the chair near the window.

"It's a true story of two young lives somewhat like yours. It was an ideal love match, an ideal wedding, an ideal first chapter of matrimony. The two were of excellent families. Money came to them by inheritance. They plunged into fashionable society in the city and at the resorts. She was a woman of beauty, fond of admiration, and burdened with a large supply of innocent intentions. He was a handsome fellow, with too much jealousy and pride, and too little tolerance and judgment. He objected to the crowd of admirers that surrounded his wife, and objected to her coquetry.

"She tried to laugh away the objections. She did not succeed. He began to like champagne too well, and to drink it too freely. Alcohol developed his suspicious nature and enlarged his obstinacy. From champagne was but a step to brandy and whiskey. From bright fellows was but a degree to fellows not so bright but more capacious in the matter of drink. The wife considered this a loss of interest in her, a cooling and a departure from love, and a steady degradation of the home. She increased her fashionable frolics, made herself more attractive to the popinjays of society. The quarrels began and increased. The one dissipated in the matter of admiration and attention, the other in the direction of intemperance and rapid companions. Finally, one night this fool of a husband got on a drunk of unusual proportions. When he reached a certain restaurant he was decidedly unsteady. I was sitting at a table with a friend. He was standing near, leaning on the end of the bar, but his back was turned my way, and I did not recognize him, although I knew him well. Presently a crowd of swells in full dress came in and took a position not far from him, but their backs were also turned to his.

"They were exchanging new and alleged experiences with the usual reckless mendacity of their set. To them a woman's honor is nothing; they would blackguard an angel in order to boast of an adventure. They talked of various ladies. Presently one of them mentioned the name of the wife in an insinuating, ambiguous way that showed what a contemptible cur he was. I arose to resent it, but before I could get fully up, I saw that drunkard arouse himself. 'You are a cowardly liar!' I heard him say, and he had not more than said it, when he jumped forward, and with a swinging blow laid that scoundrel on the floor. It was beautifully done, and, what was better, he followed it up with more of the same kind, and for about two minutes there was as pretty a scrimmage as ever took place. A policeman came in and arrested the man. I hurried to the station and did what I could to keep the affair quiet. I thought he saw and recognized me, but I found out to-night that he did not."

Walston paused. Henry's uneasiness had been steadily on the increase. Margaret seemed in a condition of collapsed uncertainty, but when no one spoke she quietly asked:

"Well, what does your story mean?"

"Nothing; absolutely nothing." He looked toward Henry and saw that he was very much worked up. Now was the time, he thought, for his climax, and so he went on with his answer: "That fool of a husband," he said, "never explained the true circumstances to his wife, and she, suffering from the neglect, largely his fault and partly caused by her own folly, and growing desperate at what she thought was a mere drunken row, decided to apply for divorce." At this point Henry arose and advanced toward the door. Walston was ready for him. "Now, Henry, you needn't try to creep out of here in that way. You know you were a fool."

Margaret relaxed her hold on the lace curtain, and her face became one anxious interrogation.

"Was it"—

"Yes," said Walston, taking the words from her, "the brute of a husband was Henry."

Henry tried to continue his progress toward the door, but Walston placed his hand on his shoulder and detained him.

"Now you two remain here a moment while I go to my overcoat and get my note-book."

Then he took himself out of the room, and brought the door to with an unmistakable slam.

It took him some time to get what he wanted, and when he returned he found a reconciliation progressing under a flag of truce.

"Now you are sensible," was his cheery comment. "You needed a little earthquake to close up that gulf, and I'm glad the shock has come." Then he suddenly changed. "But, by Jove, it isn't right. The *Comet*, is holding two columns for this—two columns at $8 a column—a dead loss of $16."

Evidently they did not care for the loss for they seemed to be trying to frame something to say to their friend.

"We want"—began Henry.

"Me to come up for Sunday dinner," put in Walston, "You dine at six? All right. I accept, and I warn you now that I shall take my revenge by eating the whole $16 worth."

"Oh, we won't complain," said Henry. "Sunday, you know, happens to be the sixth anniversary of our marriage. I was thinking of it when you called."

"And so was I," said Margaret.

Walston stopped on his way down town to look in upon the religious meeting. He got what he wanted of the religious proceedings, and sauntered on to the office.

"I am very sorry," he said to the city editor, "but that rumor about the Doncasters is a mistake. There will be no divorce. I saw both parties. The Hottentot society isn't doing much now, because it is autumn and the overcoats are in use, but they hope to get along better in the spring. How much do you wish of it?"

"Oh, burn the Hottentots! What I wanted was that divorce case. It is very disappointing."

"Very," echoed Walston.—*Harper's Weekly.*

The Seven Bibles.

The seven bibles of the world are the Koran of the Mahommedans, the Tri Pitikes of the Buddhists, the Five Kings of the Chinese, the Three Vedas of the Hindoos, the Zendavesta, and the Scriptures of the Christians.

The Koran is the most recent of the five, dating from about the seventh century after Christ. It is a compound of quotations from the Talmud. The Tri Pikites contain sublime morals and pure aspirations. Their author lived and died in the sixth century before Christ.

The sacred writings of the Chinese are called the Five Kings, the word "kings" meaning web of cloth. From this it is presumed that they were originally written on five rolls of cloth. They contain wise sayings from the sages on the duties of life, but they cannot be traced further back than the eleventh century before our era.

The Vedas are the most ancient books in the language of the Hindoos, but they do not, according to late commentators, antedate the twelfth century before the Christian era.

The Zendavesta of the Persians, next to our Bible, is reckoned among our scholars as being the greatest and most learned of the sacred writing. Zoroaster, whose sayings it contains, lived and worked in the twelfth century before Christ; Moses lived and wrote the Pentateuch 1,500 years before the birth of Christ; therefore, that portion of our Bible is at least 300 years older than the most ancient of other sacred writings.

The Eddas, a semi-sacred work of the Scandinavians, was first given to the world in the fourteenth century.

MYSTERY OF THE PLAINS.

The perils, sufferings, adventures and escapes of the pioneers of the great west can scarcely be numbered. No pen will ever write of the half of them. Some of these adventures appeal to our admiration and elicit words of praise for the pluck and bravery displayed, while others touch the heart of the roughest man and bring a mist to his eyes as he hears the particulars related around an evening camp fire.

During the first rush to the Black Hills section the government posted a small force of cavalry on the Loup Fork of the Platte river, a stream having its rise in Western Nebraska. Gold hunters and immigrants heading for the Black Hills from Eastern Nebraska, Iowa, Missouri and Eastern Kansas all followed the Loup Fork as far as they could go. The cavalry numbered only about seventy men, while the number of hostile Indians up in arms to drive back the tide was fully 3,000. The command was a menace to the Indians, however, and our camp was a half way rallying point at which the immigrants could halt and refresh themselves and repair damages. I was the only government scout attached to this command, and I had to carry a report to either Fort Laramie or Fort Kearney once a fortnight.

One afternoon seven or eight horsemen and four wagons came into our camp from the west and told an exciting story. Two weeks previous a train of 15 wagons and 40 men had left Sioux City and struck across to the Elkhorn river. Following that up for three days they had been attacked by a large force of hostiles while strung out on the march. They lost ten men and had five of their wagons cut off and captured. They went into camp, threw up breastworks, and finally beat the Indians off. Next day over 20 of the men, disheartened and afraid to continue further, took six of their wagons and started on their return to the east. There were five wagons and eight men left. One of the wagons belonged to an immigrant named John Hosmer, who had his family and all his belongings in the vehicle. He was one of the ten men killed. His family consisted of his wife, who was described as a little woman weighing less than 100 pounds, a boy of ten and a girl of six.

Mrs. Hosmer was advised to return with that section of the party which had decided to retrace its steps, but she refused to do so. She had traveled with the smaller party for five days, driving her own team and bearing up in a courageous way. Then, when within thirty miles of our camp, a reaction came, and she suddenly determined to return to Iowa. It was an embarrassing situation for the others. They did not wish to return, and of course they could not think of seeing her go back alone. They argued, coaxed and pleaded with her, but she was obdurate. When, in her own interest, they decided to take possession of her team, she seized her dead husband's Winchester rifle and threatened to kill the first man who approached. No one has ever blamed the men for allowing her to separate from them and head back for the trail. They believed that she was driving to her death, but she would not listen to them. She had come to the resolution that she would return, and nothing could be said to change it. They were rough fellows, and she was the only woman and her's were the only children in the party, but she could not have been afraid of them. There was not a man among them who would not have laid down his life for her. When they knew that she had determined to separate, they conspired to disable her wagon, but she was on the watch to prevent, and had any man attempted to detain her by force he would have periled his life. After breakfast on the morning of the day before our party reached the camp Mrs. Hosmer left them, with a curt good-by, and headed back over the trail.

This was the story as told us, and no one had reason to doubt that it was the true one. The first thing the immigrants did was to appeal to our major to send out a force to overtake the woman and bring her in. The idea could not be entertained. It was thirty miles to the point where she had separated, and, if she had not been disturbed in her journey, she had made thirty more by that hour. To expect a squadron to overtake her, even with the country full of hostiles, was almost absurd. Our great wonder was that the party had come in without being attacked, and it must have so happened that they slipped between hostile bands. It was quickly decided that we could do nothing as a command. Not a soldier could be spared from the post, which might be invested any hour. I offered, in case the major would consent, to take five of the best mounted immigrants and make the attempt, but he would not consent, and none of the men cared to encounter the peril. Fate, however, had a hand in the matter. Within two hours from the arrival of the party a courier come to us from Fort Laramie, bearing orders which I must attempt to transmit to Fort Randall. My ride would take me over a portion of the trail, and it was probable that I would make some discoveries.

"I can't ask you to deviate from your direct course or to incur any additional peril," said the major, as I was making ready to go. "Indeed, if you get through alive, with all your skill and cunning, it will lift a great load from my mind. I have no doubt there are a thousand hostiles between this and Fort Randall. The woman and children were no doubt attacked within two hours after leaving the party. It's a sad case, but I don't see how we can help them."

"Are the dispatches very important?" I asked.

"Yes, but they will keep. You need not kill your horse to deliver them."

"Then before I return I shall learn the fate of the woman."

He extended his hand and turned his face away. It was what he wanted, but he would not command it. He had a wife and two children of his own back in the States, and I knew how his sympathies went out for this poor, obstinate mother, whom grief had probably worked to such an extent that her mind was not quite right. Soon after dark that night I rode away to the northeast, only half an hour before a scouting party came in with the news that a large band of hostiles were approaching from the north. Had I been delayed a few minutes I could not have got out for a week. It was a July night, cloudy and threatening rain, and I took my chances and pushed ahead at a gallop, hour after hour, having a pretty level country, knowing I could not go wrong. I did not intend to look for the trail of the wagon until daylight, and when dawn came I found it with very little trouble. I hit it at least ten miles beyond the point where Mrs. Hosmer had separated from the band. In other words, I had gained ten miles on her back trail. I had been told of a peculiarity about her wagon which enabled me to pick out its trail at once. On the tire of one of the hind wheels the blacksmith had stamped a hand thus: ☞. This pointed in the direction the vehicle was going, and I found its imprint in a dozen places headed back for the Elkhorn.

As soon as the sun was fairly up I took a careful survey of the country and found nothing to alarm me. The great body of the hostiles had gathered lower down on the various forks of the Platte, and the small bands roaming over the section could not thoroughly cover it. I unsaddled, got a bite to eat, let my horse rest and graze for a couple of hours, and had the luck to find water, such as it was, in a sink hole. About 9 o'clock, having an almost level country ahead of me, I picked up the trail and rode on. After an hour's gallop I came to the spot where Mrs. Hosmer had made her first camp. She had made a distance of about twenty-two miles the first day, and had gone into camp in a dry ravine, deep enough to hide the wagon from sight of any one riding over the plains. She had found water, though little better than a mud hole, and had built a small fire, and cooked supper. So far as I had followed the trail the horses had kept a regular gait, proving that the woman was not unnerved by her lonely and dangerous situation. Her making camp where she did encouraged me a bit to hope that she might pull through. I rode on for ten miles beyond this camp, and then finding good water and grass and a capital place to hide myself, I halted and unsaddled again and slept until 3 o'clock in the afternoon.

When I pushed ahead again I made twelve miles without a halt. Then I reached her second camp. She had been obliged to camp on the level ground, and without water. I saw that her horses had grazed during the night, but she had built no fire. There was a great blood stain on the grass near the wagon, and a few feet away lay the skeleton of a wolf which the buzzards had picked clean. The animal had probably made an attack on the wagon or the horses during the night, and the woman had killed him. I hunted about to find the empty shell which she would have thrown out of her rifle after firing, but as I could not find it, I had to conclude that she had struck the beast with an ax or other weapon. I had gone five miles further on her back track, when I made a discovery that filled me with alarm. Either because she had sighted something to alarm her, or because her nerve had given away, she had left the trail, which ran straight to the northeast, and turned square to the east. More than that, she had put the horses to a gallop, and I knew that it was the beginning of the end. They had gone at a reckless pace for about five miles, and had been pulled down, and as I could not find a single sign to show that Indians were in pursuit, I knew what had overtaken her. She had been seized with that species of insanity that often comes to strong men when finding themselves alone on the plains. There was a terror in the situation that unnerved her.

God pity the human being left helpless on the lonely plains or the wide spreading prairies. If there was no peril the loneliness of the situation would drive one mad. One is out of the world—almost cut off from God's own protection. There is a monotony such as no other situation knows. There is a menace in the loneliness that chills the blood.

By and by I found where she had halted to give the horses water. This was a better sign, but as she drove on, her course was erratic, bending from due south to due east. This troubled me again. She had also made frequent halts, and just before dark I found a lot of the household goods which had been thrown out of the wagon. She had lost so much ground by her erratic course that I counted on coming up with her before midnight. The night came down starlight, and I had no difficulty in following the trail at a lope. I rode cautiously, however, knowing that I was approaching the Elkhorn, and realizing that I might run upon hostiles any moment.

At about nine o'clock I came upon the wagon and horses on the level ground. The tired and exhausted beasts were nibbling at the short grass as they walked along, and as they became aware of my presence they uttered shrill neighs of rejoicing and held their heads high in the air. I expected to find mother and children in the wagon, but was bitterly disappointed. At the risk of making my presence known and bringing the Indians down upon me, I shouted a score of times, and also discharged my rifle several times. I got no answer, and after waiting by the wagon for a full hour I felt that the case was hopeless. In her terror the woman had abandoned the wagon and continued her flight on foot. The horses were suffering for water, and as I could not be encumbered with them I cast them loose and let them gallop away. In the wagon were rifle, revolver and knife, so that the woman was defenseless. Taking the wagon as a fixed center, I made circle after circle around it, but I neither found nor heard of the poor wretches.

At midnight, feeling that I could do no more, and yet determined not to leave them to their fate, I went into camp near the wagon and slept until daylight. When the morning broke I took a long look around, but saw neither signs of Indians nor traces of the immigrants. I rode back over the trail for seven or eight miles, and finally found the place where the horses had been abandoned to their own guidance. I could detect it because the eccentric trail from thence on proved that they had been guided by their own will. Then I made new circles from this spot, spending the whole day in the saddle, but it was in vain. Their light feet had left no trace on the sterile plains, and after the day's search I gave up and pushed for Fort Randall.

Was the sad mystery ever solved? Never. I can to-day guide you to the spot where the Indians found the wagon and robbed and burned it, and one of the horses was found on the Elkhorn. As to the poor mother and children, only God knows where and how they perished.—*New York Sun.*

MINNEAPOLIS' NEW MILL OWNER.

Ah, Hennery, pack me luggage
And call a cabby here;
For I must leave old Lunnon
Before the glad new year.

Ye know I've bought some flour mills,
Some lifts and other rot,
Somewhere out West there, don't ye know,
I cawn't recall the spot.

It's some place near Cheecawgo
Or Bawston—I'm not clear—
I fawncy it's near the town
I bought, that makes the beer.

I'd like to see the beggars
Who grind me out me flour,
And so I'll leave the city
Within this very hour.

And Hennery, pack me hunting gear,
I'd like to shoot a bit;
They tell me there's some sport out there;
They often make a hit.

There's like to be some Indians,
And while I am not scared,
When going on a trip like this
'Tis well to be prepared.

So pack me luggage, Hennery,
And call a cabby here;
For I must see the properties
Before the glad new year.
—*Northwestern Miller.*

BOGUS AND REAL.

But Miss Hawley May Marry an Upton, After All.

"No," said Deacon Hawley, "no, I *don't* like him. And I never shall. And it's no use saying that I ever shall try to."

Deacon Hawley stood that November day in the middle of the kitchen, all wrapped up in fluffy comforters, shaggy great-coats, and knit blue and white mittens, looking like a great huge medieval giant, with nothing visible but his bright steel-blue eyes, the tip of his nose, and a great deal of grizzled beard.

There was a huge baking fire, and Matilda had just finished off a batch of mince pies, old-fashioned ginger-bread and cranberry tarts, with the luscious crimson pulp prisoned beneath bars of snowy crust. There they stood in tempting array, while Matilda herself, a tall, blooming maiden of twenty, in a striped calico dress, with her curls fastened back into a net, was pouring some sort of golden batter into a colony of small tin patty pans, to make the cupcakes in which the deacon's soul delighted.

"Now, father, you are prejudiced," said Matilda. "He is a very elegant young man."

"He's a humbug!" shouted the deacon.

"Father!"

"I'm a-speakin' out my solemn convictions," said the deacon. "A book-writer, indeed! And a journalist! I hain't been much in literary society, Matilda, but for all that I'm pretty certain that he ain't the stuff that book-writers and journalists are made of."

"But, father, he loves me!"

"He loves your father's snug farm and level meadow lands and bank account, you mean!" said the old man, shrewdly.

Matilda set down the pitcher of batter and burst into tears.

"Father," said she, "you are so hard upon James Upton. Where is all the Christian charity you boast of?"

The deacon shrugged his shoulders.

"It's kept for a different sort of man than that, 'Tilda," said he. "Look here, my girl, there's such a thing as instinct, and it tells me to beware of Jimmy Upton. Give him up, daughter. Take the advice of those who are older and wiser than you, and give him up!"

"I'll *never* give him up!" said Matilda Hawley, with tragic energy worthy of an Ophelia or a Desdemona.

The deacon shrugged his shoulders again and went out.

He was going to New York that day to investigate the financial safety of certain stocks and bonds which he contemplated purchasing, for Deacon Hawley was a man well-to-do in the world, and during the long, lonely ride through the woods to the station he thought a good deal about Matilda and Mr. Upton.

"I want her to be happy," said the deacon to himself. "But she's all I've got, 'Tilda is, and it would hurt me pretty bad to have her become the victim of a fortune-hunter. If only there was a way of finding out who and what the man is before 'Tilda is married to him hard and fast!"

At the Marmontel Bank Mr. Hawley met an old friend, Rev. Curtis Copley, once a starving country curate, now a plump and well-to-do city minister, in sleek and shining broadcloth, black kid gloves and a sealskin muffler. They shook hands heartily.

"S'pose you know a lot of people around town, Copley?" said the deacon.

"Well—a few, perhaps," mildly admitted the reverend gentleman.

"Know a man by the name of Upton—James Upton?" pursued Deacon Hawley.

"Do you mean the editor—the author of 'St. Sigmunda's Dream?'" said Copley.

"Exactly," said the deacon, clapping his hand upon his thigh.

"Oh, very well," said Mr. Copley. "In fact, quite intimately. Would you like an introduction to him?"

"Eh?" said the deacon.

"I am writing a series of ecclesiastical papers for his magazine," said Mr. Copley, with modest pride. "I was intending to call at his office this morning, in any event. Would you like to go with me?"

"Yes," said the deacon, with emphasis, "I would."

"If you've never seen a publishing house," said Mr. Copley, "I think it will interest you."

As they walked along the street Mr. Copley talked after a sociable fashion, but the deacon's answers were few and abstracted. He was wondering how it could possibly be that Mr. James Upton could be at Hazel Grange and in New York at the same time.

The deacon was nearly struck dumb when he came into the great, noisy, high-ceiled place, where the "clank! clank!" of revolving engines kept up an undertone of sound, and there were more books and papers piled up on desks, counters and shelves than ever the deacon had dreamed of. Printers, with grimy faces and flying fingers, stood at their composing cases; little "devils" flew up and down; proof-readers bent over their desks, and wood engravers toiled behind magnifying glasses. And while Deacon Hawley stared, in came a plump, bald-headed man of forty, with a jet-black mustache and eyes to match.

"Upton," said Mr. Copley, "this is my friend, Mr. Hawley, of Hazel Grange. Deacon, allow me to introduce Mr. Upton."

"Glad to meet you, sir; glad to meet you," said Mr. Upton, cordially wringing the deacon's mittened hand.

"But, I say," ejaculated the deacon, "you're the wrong man!"

"Sir!" said Mr. Upton, in surprise.

"Or else the other man is," explained the deacon. "There's a person at Hazel Grange who calls himself James Upton, and declares that *he* is the journalist and author."

"Ah!" said Mr. Upton, his quick, black eyes becoming gravely intent all of a sudden. "What sort of a man is he?"

"Not in the least like you," said the deacon. "Tall and dark, with a clean-shaven face, and a regular pair of lantern jaws. One of those fellows who is always bowing and scraping and getting behind doors."

"I see," said Mr. Upton, quietly opening a desk and taking out a photograph. "Is he any thing like *this?*"

The deacon brought his closed hand down on the lid of the desk with an energy which had well-nigh split the board in twain.

"The very one!" roared he.

"He is an impostor," said the journalist, curtly. "Arrant scoundrel! I knew him of old. He was discharged from this office a year ago."

"He's making love to my daughter," said the deacon.

"Is he?" said Mr. Upton. "It's a way he has of amusing himself. He often does it. He has two living wives already—more, for aught I know. So he is at your house?"

And then Deacon Hawley told him all about it.

"If you would come down to Hazel Grange," said he, "and confront the villain."

"I will," said Mr. Upton, with energy. "If he chooses to usurp my personality, he shall find that he has *me* to deal with."

So Deacon Hawley and Mr. Upton went down to Hazel Grange together, and with them traveled a quiet, respectable-looking gentleman, in a black suit and eye-glasses.

Matilda and her suitor were sitting cozily together in the firelight when her father came in out of the frozen starlight and clustering icicles of the winter night. Matilda started dutifully up.

"Are you very cold and tired, father?" said she

"Pretty well," said the deacon, as he kissed the girl's cherry cheeks. But he never looked at the tall visitor nor spoke to him.

"I've brought company with me, 'Tilda," said he. "Here they come!"

"Company, father?" echoed Matilda. "Who are they?"

"Mr. John Smith, of New York, a private detective," answered Mr. Hawley, "and Mr. James Upton, the author and publisher, of Down Hill square."

And the next minute the plump, bald-headed editor and the quiet detective were *vis-a-vis* with the impostor.

"Sir," cried Mr. Upton, "you are a villain!"

"Sir," said Mr. John Smith, "I arrest you for bigamy, at the suit of Mrs. Rhoda Gale, your last victim!"

So Mr. James Upton, *alias* half a dozen other high-sounding names, was carried ignominiously back to New York by the detective, while the genuine Mr. Upton, at the earnest solicitation of the deacon, consented to remain all night at Hazel Grange.

"You are a wicked, cruel man," cried Matilda, dissolved in tears.

"My dear young lady," said the journalist, "you will live to thank me for this."

"You are a monster!" said Matilda, motioning him away. "Don't speak to me!"

"Don't mind her," said Deacon Hawley. "We'll smoke our pipes by the great open fire-place in the kitchen. She'll come to her senses by that time."

So the deacon and the editor went into the back kitchen, where there was a gigantic fire-place full of blazing logs, with old-fashioned brass andirons, and a stone hearth, and presently Matilda came out.

"I—I'm sorry for what I said just now," said she, looking very pretty, with her wet eyelashes and crimson cheeks. And so she made up with the editor.

Mr. Upton—the real—went back to New York; and, pleased with the antique furniture, he came down again in a few days; the country air agreed with him, he said.

"Wouldn't it be strange," said the deacon, chuckling, when the editor went back the second time, "if my 'Tilda should be a Mrs. Upton, after all?"

"Don't, father!" said 'Tilda. But she blushed very prettily when she said it.

Mr. Upton, the *pretender*, is now beginning his term for bigamy. And there is every probability that society will be deprived of his valuable countenance for awhile.—Jennie Brundage, in N. Y. Ledger.

STARS AND STRIPES.

Changes That Have Been Made in the Flag of Our Nation.

The addition of new stars does not interfere with the symmetry of the flag, says the New York Mail and Express. Had the original intention of Congress (of adding a star and a stripe for every new State) been carried out, our flag would now be a curious combination.

When the colonists first came to America they brought the flag of Great Britain. This was formed of a union of three crosses of St. George, St. Andrew and St. Patrick, and marked the union of England, Scotland and Ireland.

When the colonies began to rebel against the pressure of British laws they constructed a plain flag without the bars or crosses and placed upon it a rattlesnake cut into thirteen pieces, representing the thirteen colonies, with the motto in large capitals: "Unite or Die." But after the thirteen colonies became more united and determined to resist British tyranny, they placed a well-formed rattlesnake on the flag, with the new motto: "Don't tread on me." Benjamin Franklin, on being asked the meaning of that emblem, wrote as follows: "On inquiry and from study I learned that the ancients considered the serpent an emblem of wisdom, and, in some attitudes, of endless duration. Also that countries are often represented by animals peculiar to that country. The rattlesnake is found nowhere but in America. Her eye is exceedingly bright and without eyelids — emblem of vigilance. She never begins an attack, and she never surrenders — emblem of magnanimity and courage. She never wounds even her enemies till she generously gives them warning not to tread on her—which is emblematical of the spirit of the people who inhabit her country. She appears apparently weak and defenseless, but her weapons are nevertheless formidable. Her poison is the necessary means for the digestion of her food, but certain destruction to her enemies—showing the power of American resources. Her thirteen rattles, the only part which increases in number, are distinct from each other, and yet so united that they can not be disconnected without breaking them to pieces, showing the impossibility of an American republic without a union of States. A single rattle will give no sound alone, but the ringing of the thirteen together is sufficient to startle the boldest man alive. She is beautiful in youth, which increaseth with her age. Her tongue is forked as the lightning, and her abode is among the impenetrable rocks."

The next form of the United States flag was the stars and stripes. The proportions are perfect when properly made, the first and last stripe being red with alternate stripes of white. The blue field for the stars is the square of the width of seven stripes. On June 14, 1777, the Continental Congress resolved "that the flag of the United States be thirteen stripes, alternate red and white, and that the union be thirteen white stars on a blue field, representing a new constellation." The stars of the flag represent the idea taken from the constellation Lyra, which signifies harmony. The blue of the field was taken from the banner of the Covenanters of Scotland, likewise significant of the league and covenant of the united colonies against oppression and incidentally involving vigilance, perseverance and justice. The stars were disposed in a circle, symbolizing the perpetuity of the Union, the circle being the sign of eternity. Both the thirteen stripes and the stars showed the number of the united colonies, and denoted the subordination of the States to, and their dependence upon, the Union as well as equally among themselves. The whole was a blending of the previous banners, namely, the red color, which in the days of Roman glory was the signal of defiance, denoting daring, and the white, purity.

On the 13th of January, 1794, by an act of Congress, the flag was altered to fifteen red and white stripes and fifteen stars, there having been two new States added to the Union, and the flag thus altered and enlarged was the one which was borne through all the contests of the war of 1812. On the 4th of April, 1818, Congress again changed the flag by returning to the original thirteen stripes and fifteen stars, as the adding of a new stripe for each additional State would soon make the flag too unwieldy.

Now a new star is added to the flag on the Fourth of July following the admission of a new State into the Union. The perfect flag, with its thirteen stripes of white and red, and its blue field, with its fifteen white stars, was unfurled for the first time at the battle of Saratoga, October 7, 1777, by Benedict Arnold, who bore the flag during that important engagement. After his desertion of the American army he carried his uniform and the same flag to England, where he died in poverty and distress in the year 1801.

AN ANCIENT HOOSIER.

Daniel Frederick, Who Was Born in 1789, Still on the Earth.

Daniel Frederick, who lives on a farm four miles east of Vincennes, Ind., is one hundred years old. He walks with a rustic cane, and is not bowed with age. He steps with a surprising alacrity, and hears with a distinctness and answers with a promptness that is remarkable. His face is not full, nor is his body burdened with corpulency, but in every movement he manifested the wire and endurance of his physical organization. His mind has always been clear, and his life has been comparatively quiet and uneventful. Indeed, he has been perfectly contented with the quiet life of a farmer, which perhaps accounts largely for his longevity. His short whiskers under his chin were quite gray if not white, but his hair is still nearly black and thick upon his head. It was no little astonishment to hear that he had never worn spectacles and that his eyesight had never failed him. He said he never had what many people call their "second eyesight."

His appetite is as good as it ever was, and he sleeps as peacefully as a child. His health has always been good except on two occasions, the last one of which was nineteen years ago, when he had what the physicians called a fever. His father's name was Louis Frederick and his mother's name May Mary. They came from Tennessee to this county when the Indians still skulked through the country and killed unsuspecting farmers as they followed their plows. He was born in Knox County, October 16, 1789, the year Washington took the reins of government under the present Constitution, therefore he has lived under every President this country has had since the beginning. He was born and "raised" on the Louis Marchino place in Johnson township and has always lived in the country. "Youngsters now," said he, "don't know what hard work is. See my young days, I worked hard, minded nobody's business but my own, and maintained my mother and grandmother with these hands for forty years. The best of farm laborers then only got $6 per month, and in harvest time when extra pay was given we only got 50 cents a day. We used reap-hooks then and plowed with wooden moldboards. We raised just as good corn then as now, but not so much of it. Corn then was 10 cents per bushel and potatoes the same."

Mr. Frederick had but few school advantages in those days, but he learned to read and write. Last June fifty-one years ago he was married to Miss Rhoda Farmer. She is the mother of sixteen children, six of whom were twins. Four of the twins are dead.

Young Women in Alaska.

In Alaska a girl is ready for society as soon as she enters her teens. It does not require many years in that country for a girl to grow up. The dress of the average Stickeen river maiden is not very elaborate. A plain cotton garment, long and loose, envelops her person, and a Turkish bath-towel is wound about her head. When she goes out a blanket of bright colors is thrown around her shoulders. The wife of a missionary in that section says the young women often go barefooted, but that after they see the boots and shoes of white women their great desire is to have a pair.

A Quiet Send-Off.

"Good evening, Mr. Stickby; you really must come to see me again some time." "Er, but I wasn't going quite yet, Miss Eva." "Oh, I beg your pardon! You generally do go, you know, after an hour's silence."

THE SECRET SERVICE.

Some of the Extraordinary Feats Performed by Lafayette C. Baker, the Founder of the Service—The Suppression of Counterfeiting.

In his report to the Secretary of the Treasury, Chief Bell, of the Secret Service, says, according to the Washington Capital:

The wars of the revolution and of 1812 doubtless brought forth something corresponding in its general features to the Secret Service organized by the United States Government during the late civil war, but no records have been preserved.

The Secret Service, as we know it, may be said to have its origin in June, 1861, when Lafayette C. Baker tendered his services to Secretary Seward as a sort of police scout to gather information of the condition of the affairs in the Southern Confederacy; his proposal was accepted and he was passed through the lines and began his work. He represented himself as a Southerner, with interests which attached him unalterably to the cause of the seceding States. At first he was regarded with suspicion and was arrested and taken before Jefferson Davis himself for examination.

He was imprisoned for some time and tested by his captors in various ways, even to the point of being threatened with hanging as a spy; but he played his part well, and his ready wit and unfailing nerve not only carried him through this ordeal in safety, but caused him subsequently to be made a confidential agent of the Confederacy, and sent North in quest of special information for Mr. Davis and his advisers. In his dual capacity he performed some extraordinary feats, and gathered about him a set of men after his own heart.

The scope of their joint labors gradually enlarged to such an extent that it was deemed better for the War Department to direct their operations; so early in 1862 the transfer was made, and the organization took their orders thenceforward from Secretary Stanton till after the close of the war and the death of President Lincoln.

The crime of counterfeiting was so appallingly on the increase that in 1864 Congress appropriated $300,000 to suppress it. This money was placed in the custody of the Secretary of the Treasury, and Solicitor Jordan was commissioned to oversee its expenditure. Mr. William P. Wood was relieved from duty as keeper of the old Capitol Prison in order to give his attention to the suppression of counterfeiting.

In July, 1865, Secretary McCulloch created the Secret Service division and placed Mr. Wood at the head as chief. He surrounded himself with a larger body of men than Baker ever had, but their tenure of office was slight. They were appointed, as a rule, to look after special cases, and dropped from the rolls when such cases were finished. Much of the appropriation was paid to outsiders for information, other large sums were expended in the forms of rewards; the balance for the per diem pay and incidental expenses of the agents.

But Congress did not continue this lavish outlay. For a number of years afterward only about $150,000 was appropriated, though sometimes deficiencies were allowed which carried the totals to considerably higher figures.

At that time the work continued, in many respects, on the same lines that Mr. Baker had marked out. The service laid its hands on every thing of a fraudulent character—bounty, pension and customs swindles, and the like—but the greater part of the money was expended to suppress the counterfeiting of the paper currency.

A continued reduction has been made in the annual appropriation, so that from $300,000 appropriated in 1864 it had gradually grown less until it reached the present annual sum of $60,000, besides limiting the scope of duties of the service strictly to counterfeiting, back-pay and bounty-frauds, and requiring that every dollar should be expended on certain definite objects. Last year Congress voted an additional $4,000 for the investigation of claims for expenses incurred in the last sickness and burial of pensioners, but this was the first sign manifested in a long while of a disposition to restore the service to its old breadth of usefulness.

Restricted as we are by the form in which the appropriations are made, if agents were content to abide merely by the letter of the law, they would never be able to bring a criminal to justice. To their honor be it said, however, that they interpret their duty by the spirit and not the letter, and often in the pursuit of frauds spend money from their own slender purses to protect the Government from robbery, when they realize that the statute of appropriation can not be stretched to embrace the outlay, and have no hope of reimbursement.

Bavaria's Mad King.

Otto, the mad King of Bavaria, is thus described by one who has seen him at Furstenried: "Tall and almost as gigantic in stature as his brother, the late King Ludwig, his appearance is sufficient to startle any one who sees him for the first time. His hair is long and unkempt, and his bushy, brown beard reaches down below his waist. There is a kind of wild, weird look in his eyes, the gaze of which remains steadfastly fixed straight ahead into empty space. The only person who can succeed in bringing a gleam of intelligence to his face is the sixty-year-old Mme. Marie, who was his nurse when a child. She is the only person who is permitted to speak to him."

Descent Into the Grand Canyon.

"I went to the bottom of the Grand Canyon of the Colorado last winter," said W. T. Hart to a St. Louis Globe-Democrat reporter, "and am one of the few men who ever attempted the descent. I went there to examine a mine said to exist in the bottom of the canyon. I have been all through the Rockies, from Montana to Central America, and know what a chasm is, but the sight of that abyss took my breath away. From the top to the bottom it is fully six thousand feet. Over a mile below you can see the river tearing through the gorge, but not a sound can be heard, it is so far away. From one bank to the other it is, apparently, not over a quarter of a mile, but, as a matter of fact, it is fully nineteen miles. My guide told me I would never be able to reach the bottom, but I was determined to go, and I went. It was a terrible climb, and it took us eight hours to reach the bottom. It is certainly the most desolate place in the world. There is not a living thing down there—no insects, reptiles or animals of any kind. Every thing is absolutely dead. The mining prospect was worthless. Before the sun was up the next morning we were on our way out, and it took us until ten o'clock that night to climb the wall of the canyon."

VARIETIES.

SUMWAY—I am in hopes of getting an appointment in the agricultural department.

Maddox—What qualifications have you? You don't know anything about agriculture, do you?

Sumway—Well, I am getting pretty seedy.

BOARDING Mistress (after watching a boarder eat three sausages with great celerity)—You must be an Odd Fellow, sir.

Boarder—You have guessed it; but how did you know?

Mistress—I knew you must be, by the familiar way in which you handled those three links.

AN Englishman who had been invited to dine with Prince Kaunitz had the misfortune to upset a glass of wine on the table.

"Is that the custom in England?" inquired a German princeling.

Not in the least abashed, the Englishman replied:

"Not exactly; but when it does happen nobody makes a fuss about it."

BEFORE the ashes were cold upon the site of Lynn's manufactories and business blocks, signs appeared in all quarters announcing that, "Owing to circumstances beyond our control, we have removed our place of business to—" There is a grim humor, as well as a feeling of indomitable enterprise and tremendous energy about such announcements as these which surely can be found in the character of no other people on earth.

WILLING TO THROW HIM IN.—Wife (in sudden alarm)—John! John! Do wake up. I hear somebody moving about in the house! Husband (in great alarm)—Wh-what? Somebody in the house? If I didn't have the rheumatism so blamed bad, Maria, I'd— Wife (disgusted)—Say! You burglar down-stairs! When you have got all the other plunder you want, I wish you would come up here and carry off this thing that calls itself a man!

MRS. A.—Just think, Mrs. R., my little Moffie lost a dollar bill on her way to the grocery.

Mrs. B. (proudly)—That couldn't happen to my little Fanny. She is too smart for that; ain't you, Fanny?

Fanny—Guess I couldn't lose my dollar bill when you never send any money to the grocer's. He always writes it down in a book, and when he wants any money from us he has to come five or six times.

A NOTORIOUS poacher was brought up recently before the sheriff court at Jedburgh for engaging in his nefarious practices of illegally killing salmon. He was found guilty and fined thirty shillings or ten days' imprisonment. Pleading inability to pay the fine, the sheriff asked him how long he would require to make it up. "Weel, my Lord," returned the culprit, scratching his head, "that a' depends on hoo the fish come up the water."

WICKWIRE—I wish to goodness somebody would invent a way to distinguish between a type-writing machine and the girl who writes it. Yabsley—I should think a man of ordinary sense would have no trouble in doing so. Wickwire—Oh, you idiot, I mean in writing. I received a bill that I was indebted to Blank & Co. for "ribbon for typewriter," and my wife got hold of it and raised a dickens of a row for about an hour before she would let me explain.

SPEAKING of the cold-blooded way that medical men have of discussing the various physical misfortunes and ailments of their fellow-men, a Bellevue student told a good story last night of old Dr. Bock, a well-known surgeon. The doctor was amputating the leg of a patient, whom he had under the influence of an anæsthetic. The patient was exceedingly restless, and two or three times partially rose up and glared at the operation. Finally the doctor's patience gave way:

"Lie down there," he commanded. "You have got more morbid curiosity than a medical student.

TALLEYRAND'S wife was the reverse of brilliant, and he used to excuse his marriage on the ground that "clever women may compromise their husbands, stupid women only compromise themselves." One day the famous traveler M. Denon was expected to dinner, and Talleyrand conjured Madame to prepare herself for sensible conversation by looking over Denon's works. Unfortunately on her way to the library Madame forgot the name. She could only remember it ended in *on*. The librarian smilingly handed her a copy of Robinson Crusoe. Madame easily mastered its contents and at the table astonished her guest by exclaiming: "*Mon dieu, monsieur*, what joy you must have felt in your island when you found Friday."

AN up-country innkeeper in Australia had a cockatoo whose cage hung in the bar. Now the innkeeper was not over quick at his business, and being slow in his movements, was in the habit of saying, whenever the bar was crowded: "One at a time, gentlemen, don't rush a fellow." One sunny day the cage containing the cockatoo was hung outside, and by some inadvertance the door of the cage was left open; seeing which the bird escaped. The innkeeper, going out after awhile to see how the cockatoo was getting on, missed him, and at the same time noticed a wild commotion and chattering going on amongst some magpies (which infest parts of Australia) at the end of the field. On going over he found this poor cockatoo nearly dead, with the magpies pitching into him in great style, while the cockatoo cried in a very faint voice indeed: "One at a time, gentlemen, don't rush a fellow!"

A WEST Side attorney, noted for his absent-mindness, as well as for his business shrewdness, is in the habit of leaving the management of his house entirely to his wife, in whose ability he has the utmost confidence. He furnishes her with the wherewithal to run things, and never inquires or cares about what she does so long as his comfort is provided for. One evening not long ago, he was seen standing on the corner of Grand Avenue and West Water Street, looking disconsolate and greatly troubled.

"Hello, Blank," said an acquaintance, "what's the matter?"

"Dash it," he responded, "I'm in a deuced bad box, and I don't know what to do. My wife moved to-day. She told me this morning she was going to move, and where she was going to move to, but I'll be blessed if I remember where it was. I think it was somewhere in the Thirteenth Ward. Where do you think my wife would be apt to move to?"

The friend could not help him, and how and where he found his domicile history sayeth not.

THIS is one of Lady Bulwer's stories of the society lady: "Who is this Dean Swift they were talking about?" she asked Lady Bulwer "I would like to invite him to one of my receptions." "Alas, madam," replied the other, "the Dean did something that has shut him out of society." "Dear me! What was that?" "Well, about a hundred years ago he died."

The story is told of a former vice-president of the United States, who, walking around the library, saw a folio lettered "Virgilii Opera." "Bless my soul," he exclaimed, "I had no idea that Virgil wrote operas." And the writer can certify that a member of the Board of Education in Philadelphia, in a large bookstore in that city, while examining a copy of the de luxe edition of Prescott, was heard to remark: "By the way, who was De Luxe; was he the printer or the binder?"

A delightful blunderer was the gentleman who complained of these beastly dialect poems and stories: "The other day I came across a fellow called Chaucer and I'll be hanged if I could read him!"

AT Cornell University, some ten years ago, the faculty and other residents in the neighborhood of the campus, were aroused one dark night about three a. m., by the booming of the brass cannon in the middle of the parade ground. The explosion was so terrific as to shatter, not only all peaceful slumbers, but some seventy panes of glass and other fragile property.

The faculty understood that it was some students' prank, and determined to detect and punish the offenders.

A watchman was detailed the next night, who kept a villigant lookout until after three o'clock, when he concluded that the attempt would not be made that night and went indoors. He had hardly got in bed when—boom! boom! went the cannon one after the other, scattering more dreams and glass. This seemed to indicate that the conspirators were quite as watchful as the deans.

The third night the faculty determined to bring science to their aid, and the professor of chemistry directed that the cannon be secretly smeared with nitrate of silver, which on the fingers of those handling the cannon would turn dark and indelible when daylight struck it. This is the same substance with which photographic plates are prepared, and which leaves such perpetual stains on the hands of of most photographers.

"Now," said the professor, "if those cannons are heard to-night, we shall see who has black hands in the morning. Mighty is the science, and shall prevail against the wicked!"

The cannon was heard again that night; and louder than ever. The culprits put a good generous dose of powder into each gun, and rammed in on top of it a heavy charge of sod, gravel, sticks and stones, and such like ammunition as the campus furnished; loading up to the muzzle, and turning their gun on an old shed, standing on the grounds, against which they had a particular grudge. The report which ensued was fairly appalling; it completely wrecked the shed and demoralized such remnants of peace and window glass as the two previous nights had left standing. The only wonder is that the cannon did not explode and blow up the artillerymen themselves; but it was good metal and stood the tremendous test. And when the professors had done quaking at the dreadful racket, they chuckled to themselves and said:

"Wait till morning and see the black hands!" Morning came and not a stained hand could be discovered in the University. Alas! too many of the students were in the chemistry class. They also understood the etiquette of polite gunnery. They had handled the cannon with gloves.

Chaff.

The buckwheat crop this year takes the cake over all former seasons. It wins by a mere scratch, however.

Few people are wholly wrong. The clock that does not go at all is right twice in every 24 hours.—*George Eliot.*

Jones—Look at Brown over there in the corner. Smith—Yes; buried in thought. Jones—Mighty shallow grave, isn't it?

A good deal of sympathy is being wasted on Dom Pedro. Thousands of men would agree to stay away from Brazil for $450,000 a year.

"Oh, he is a born debater. There is nothing he likes better than an argument. He won't even eat anything that agrees with him."

St. Peter—Who are you? New Spirit—Um—I was the manager of a British syndicate. St. Peter—Well, you skip. This place is not for sale.

A speaker at a public meeting talked and talked. "How full he is of his subject!" said a friend. "Yes," said an enemy; "but how slow he is to empty himself!"

"What are your children quarreling about so continually?" "Why, you see, they are so of one heart and mind. Whatever one wants the other wants too.

Farmer Squashead (observing a metropolitan daily on the counter of the village store)—What! Ain't that air paper busted up yet? Why, I quit taking it fifteen years ago.

He—I don't see why you won't marry a man without capital if he has a good salary. Mother Eve married a gardener. She—Yes, and the first thing he did was to lose his situation!

The debating society of Fredericksburg, Berks County, has come to the conclusion that "a cross and clean woman does not make a better wife than a dirty and good-natured one."

Mrs. Parvenu—None of my receptions is exclusive, Mr. Lilywhite; you is at liberty to invite any one you like. Mr. Lilywhite—Thanks, awfully. I will bring Lindley Murray with me next week.

A Jew went up to a railroad station agent and said: "Gimme a tiget to Springfield." "What Springfield?" asked the ticket-seller, "Illinois or Mass chusetts?" "I don't gare. Vichever's the cheapest."

Station Master—Come, come, my good man! You mustn't walk on the track. Tramp (disgustedly)—The conductor says I can't ride, and you say I can't walk. What's your blamed old road here for, any way?

Mrs. O'Rourke—An' phwhere are ye goin' now, Teddy? Mr. O'Rourke—Down to the turr-r-key raffle, darlint. Mrs. O'Rouke—Well ye had tether lave the price av the corn bafe an' cabbage wid me afore you go.

It would be just as well for the aspiring conversationalist to remember that bit in *Punch*, where Jones says of his friend Brown: "Oh, he's such a bore. He is always talking of his own affairs when I want to talk about mine."

Short-sighted gentleman chooses a pair of spectacles. "These glasses," he says, "are not strong enough for me." "But, sir, they are No. 2." "What have you next to No. 2?" "No. 1." "And after that?" "After No. 1, sir, you will want a dog!"

Eastern Man—I hear you had quite a drought out your way this summer. Western Man—Yes, a fearful one! E. M.—Was it so very dry, then? W. M.—Dry! Great Scott! It was so dry that when a woman cried she couldn't raise a single tear.

Lady Customer—I would like to look at some silks. Polite Clerk—Here is something very pretty in wine color, madam. L. C.—Oh, that would never do in the world; my husband is a prohibitionist. Clerk—Well, madam, here is something in watered silk.

"That note," said the teacher in Isaacstein's family,—"that note must be extended into the next measure. "Vot's dot?" angrily shouted the senior Isaacstein, rushing into the room. "Jakey, don't you do it! Make it a business principle never to extend a note midout you get first-class security."

"Did you win your suit?" "I did." "Really?" "Quite so! Our judge is the most honest man in the world. The day before the decision I wrote him a few lines begging him to accept a check of 500 francs which I enclosed." "But it seems to me this was a proceeding which might have ruined your case." "Quite so! Only I took care to sign my adversary's name to the check."

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The Dairy.

The Dairy Interest in the United States.

At the annual meeting of the Iowa Dairy Association a paper was read by a Mr. Fitch, of New York, which gave some figures show the extent and growth of the dairy interests in the United States. According to his statements the entire number of milch cows at the beginning of the present year in the United States were 15,298 625, valued at $366 226,376, and the annual production of milk 5,000.000 000 gallons, and the value of dairy products for 1888 more than $500,000,000. The population engaged in this industry is variously estimated at from 4,000,000 to 8,000,000. The capital involved is something enormous. The acreage required for milch cows on farms alone in 1880 was 71,176 940 acres, valued at $1,353,785,399. Including the limits of towns and villages its value was $1,521,600 000. Add to this the value of factory properties and dairy interests and the aggregate is largely increased. This was in 1880. The acreage has been enormously increased in the nine years which have followed, so that capital invested in dairying to-day may be safely estimated at more than $2 500,000,000. Of the dairy States, New York stands first, with Iowa second, but crowding rapidly to the front. The relative standing of the four larger dairy States is as follows:

	No. of Milch Cows.	Value.
New York	1 5[illegible]2,373	$45,95[illegible],211
Iowa	1,2[illegible]3 095	2[illegible],861,[illegible]00
Illinois	974 975	2[illegible],563,3[illegible]0
Pennsylvania	9[illegible]9,371	25,618,465

The stride forward to these startling figures has not only been rapid but necessary. History shows that the natural course of farm industry is from cereals to mixed farming and thence almost exclusively to dairying; thus dairying has superseded grain growing in almost all of the older districts in our Northern States, and is rapidly chasing westward along the dairy belt and re-enriching the depleted soil of those States.

The quantity of butter and cheese made in the United States quadrupled in the twenty-five years before 1880. Commercial dairying was formerly confined to New York, and small districts in Vermont and Pennsylvania. It was then introduced into Northern Ohio, Illinois, Wisconsin and Iowa. Eighteen years ago the first creameries were started in Illinois; now the State exports over 100 000,000 pounds of butter and cheese annually. Creameries were started in Iowa still later. Now Iowa has 695 creameries, which for the year closing Nov. 1, 1889, manufactured 41,576,548 pounds of butter, and 164 cheese factories, which manufactured 4,326,982 pounds of cheese. This is an increase of seventy-five creameries and sixty cheese factories for the year. The estimated value of crop for 1888 was $15 731,075 80. Total dairy product for 1888, $17,721,606 98.

The phenomenal strides made not only in the quantity but also in the quality of production throughout the West—vastly greater than in the East—has been achieved against and in spite of strong prejudices. The writer remembers well the strong prejudice that existed a few years ago in the eastern markets against anything in the dairy line coming from west of New York or Pennsylvania. If it came from the extreme western township of New York it was all right, but if it came from Northeast Ohio, twenty miles further west, it was not to be compared for a moment with the product of New York.

The dairy belt follows a line from the Atlantic to the Mississippi, varying from 150 to 200 miles, from, say, the middle of Pennsylvania in the south and New England and New York in the north, taking in Northern Ohio and Southern Michigan, Northern Illinois and Southern Wisconsin. West of the Mississippi it widens sufficiently to take in the whole of Iowa and Southern Minnesota. Beyond the Missouri it includes Western Kansas, Nebraska and South Dakota. Of course there is more or less dairying outside of these limits, but the domain thus described is pre-eminently the dairy section of the whole country.

Mr. Fitch, in his closing remarks said: This is an age of competition, keen and sharp. Fortunes are made, not through enormous profits, but through moderate prices with constantly improving quality and increased volume of production. The problem all over the world to-day in anything and everything is to produce a good quality in large quantities at a small profit. Every industry that neglects this is dropping behind, and every industry that is fully awake to the problem is not only holding its own, but is steadily advancing. The merchant who does not understand his business or who is careless or indolent is as sure to collapse as the sun is to go down. He must recognize competition and meet it; all helps, all possibilities, are open to all alike. He who seizes them succeeds, he who neglects them fails. The dairy industry is no exception; its economy must be studied and practiced. The cow is a machine, and like all machines must be selected for what it does. Only those cows which give an abundant flow of milk, rich in butter fat, will pay. Such cows cost no more to keep than those which produce half of the quantity. No careful merchant will retain a clerk who does not pay him a profit; nor can a farmer afford to keep cows which do not pay their way. The cows' feed should be carefully looked after; and no dairy farmer is equally qualified for his business, who does not understand the economy of milk food and care of his stock. In short, the cow machine must be of the very best, and must be worked for all she is worth.

Shrinkage in Milk.

Henry Stewart, in the *Rural New Yorker*, in reply to an inquiry as to cause of shrinkage of milk, supposably on account of feeding cotton-seed meal, says:

"The effect of cotton-seed meal upon such high-milking cows as Guernseys and Jerseys, when fed even in small quantities, is to act upon the milk glands so as to stimulate their action in the production of milk and butter. It is frequently the case when highly stimulating food is given that the action is diverted from the production of milk, and injurious congestion, due to the increased circulation of blood, is produced. This causes tumefaction or hardness of the milk glands and the udder becomes hard or fleshy, and the glands no longer perform their office of milk-secretion. This seems to have occurred in this case and it is doubtful if any recovery will be made. If the cow continues to give a pound of butter a day she is certainly worth keeping, and it would be a pity to kill her for beef. When the cow has another calf she may probably be restored by judicious treatment. This should consist of a careful gradual drying up of the cow before calving; light feeding, without any grain at all for two months previous; a dose of one pound of Epsom salts a few days before the calf is expected; and very light feeding for a few days after it. Gentle rubbing and kneading of the udder are useful to cause absorption of the injurious matter, and restoration of the glands to healthful action, which under the circumstances is not by any means improbable. Hence there is good reason to avoid sacrificing a good cow. It will be wise, however, even now, to feed very moderately of grain, and to adhere to corn-meal only, with bran given in the form of mash, and to keep the cow in a laxative condition."

FOR the holidays the Detroit, Grand Haven & Milwaukee Railway will sell round trip tickets from all stations at one fare and a third for the round trip. For Christmas, tickets will be sold on the 24th and 25th of December, and for New Years on December 31st and January 1st. Both classes of tickets will be good to return up to and including January 6th, 1890.

Veterinary Department

Anasarca or Watery Infiltration of Cellular Tissue.

BRECKENRIDGE, Mich., Dec. 7th, 1889.

Veterinary Editor of the Michigan Farmer.

I have a bay mare, five years old, weighing about 1,100 lbs., in foal about six months, that troubles me with stocked legs. Her general health is good. Have been feeding corn and straw since fall work has been done, and she has very little exercise; but when driven a couple of hours the swelling all disappears, but next morning will be as bad as ever. Legs do not feel feverish.

SUBSCRIBER.

Answer.—Your description of the trouble with your mare indicates anasarca, or watery infiltration of the cellular tissue of the legs, due to general debility in the system, indicated by pitting or denting on pressure with the fingers. The schneiderian membrane lining the nostrils, and conjunctiva, or lining of the eyelids, are paler than usual; pulse small, soft and feeble, due to an impoverished condition of the blood. Corn is not proper feed in such cases. Good nutritious food, with pure air, light and moderate exercise, are important; also fresh water, good sized and clean paddock, where the animal can take sufficient exercise to keep the limbs clean. Feed good oats, and hay in moderate quantity, or give clean oat or wheat straw instead of hay. If in a week or two the swelling still remains, give the following: Sulphate of iron, pulv., two oz.; gentian root, pulv., one oz.; Jamaica ginger root, pulv., half an ounce; nitrate potash, pulv., one oz. Mix and divide into twelve powders; give one night and morning until used; if necessary repeat the medicine once a day.

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, December 14, 1889.

FLOUR.—The decline in wheat has led to millers reducing the price of their product. Quotations on car load lots are as follows:

Michigan roller process	3 80	@3 90
Michigan patents, old	4 30	@4 40
Minnesota, bakers	3 60	@3 70
Minnesota, patents	4 60	@4 70
Rye	2 65	@2 75
Low grades	2 25	@2 50

WHEAT.—Market closes weak at a decline from the figures of a week ago. New York, Chicago and St. Louis were slightly lower, while Liverpool was steady. Closing prices here to-day were as follows: No. 1 white, 79c; No. 2 red, 80¼c; No. 3 red, 72c; rejected red, 61c. Futures closed with No. 2 red for December at 80¼c, January at 80¾c, and May at 85c per bu. No. 2 white spot sold at 72c, and No. 3 at 66c per bu.

OATS.—Advanced early in the week, but have since declined. Quoted at 26c for No. 2 white, 24c for No. 2 mixed, and 25c for light mixed.

CORN.—Dull and lower. No. 2 quoted at 34c per bu., No. 3 at 31½c, and No. 3 yellow at 32½c.

BARLEY.—Quiet and unchanged; quoted at a range of 60c@$1 00 per cental. Some sales by sample were made yesterday at 75c per cental.

CLOVER SEED.—Lower. Prime spot, $3 50 per bu.; January delivery, $3 47½; February, $3 52½. No. 2 spot sold at $3 20 per bu.

RYE.—Quoted at 47c per bu. and firm.

TIMOTHY SEED.—Job lots in bags quoted at $1 45@1 50 per bu.

FEED.—Winter bran quoted at $10@10 50; middlings, $10@12.

BUTTER.—Choice in fair demand, low grades not wanted. Dairy quoted at 18c for choice, and 16@17c for ordinary to good. Creamery quiet at 20@25c ℔.

CHEESE.—Unchanged. Michigan full creams held at 11@11½c ℔., and New York at same figures.

EGGS.—The market is firm at 23c. Receipts of fresh light. Cold storage stock sold at 20@20½c. Limed quoted at 17@17½c per dozen.

HONEY.—Quoted at 13@14c for comb. Extracted, 7@9c. Market dull.

HAY.—Best timothy in car lots, $12 50; in small lots $13 50; clover, in car lots, $9; in small lots, $11; straw, in car lots, $5@5 50; in small lots, $8 per ton.

BEANS.—Quoted at $1 65 per bu. for city picked mediums. New unpicked sell at $1 00@1 25 per bu. Market very dull.

SALT.—Michigan, 80c per bbl. in car lots, or 83c in 10-bbl. lots; dairy, $1 80@2 10 per bbl.; Ashton quarter sacks, 72c.

HIDES.—Green city, 3½c ℔., country 4c; cured, No. 1, 4½@5c; No. 2, 2½@3c; calf, No. 1, 4@4½c; No. 2, 3c; veal kip, No. 1, 3c; runners and No. 2, 2½@3c; sheepskins, 50c@$1 25 as to quantity of wool.

FOREIGN FRUITS.—Lemons, Messinas, ℔ box, $3 75@4 00; oranges, Florida, $2 75@3 25 ℔ bbl.; bananas, yellow, ℔ bunch, $1 25@2 00. Figs, 11@12c for layers, 15@16c for fancy. Cocoanuts, per 100, $4@5. Persian dates, new, 7@7½c ℔ by the box. Malaga grapes, per bbl., $6 50@7.

BEESWAX.—Scarce and firm at 28@30c ℔.

POTATOES.—Market steady at a range of 34@38c per bu. for car lots, and in small lots at 38@42c per bu.

APPLES.—Market dull, and prices lower. The range is $1 50@2 00 per bbl. for ordinary stock, and $2 50 for fancy. From wagons good seconds sell at $1 75@2 00 to retailers. Very few really choice apples are to be had.

DRIED APPLES.—Market dull; quoted at 4c for common, and 7@7½c per lb. for evaporated.

HUBBARD SQUASH.—Quoted at $2 per cwt.

ONIONS.—The market continues firm and steady at $1 90@2 ℔ bbl., and 65@70c per bu.

BUCKWHEAT FLOUR.—Selling at $2 25@2 50 per cwt. The supply is liberal.

CIDER.—Common quoted at 7@9c per gallon, pkgs extra. Clarified, 10c.

CABBAGE.—Dull at $3@4 per 100, outside for small lots.

CHESTNUTS.—Sellers hold firmly at $7 50 per bu.

CRANBERRIES.—Market firm; Jerseys were quoted at $9 50@10 per bbl. and $3 25@3 50 per bu., and Cape Cods at $10@12 per bbl. and $3 50@3 75 per bu.

CELERY.—Quoted at 30@35c per doz.

POULTRY.—Live: Fowls and chicks, 6@6½c ℔.; geese, 7@8c; turkeys, 9@10c; pigeons 15@20c per pair. Dressed: Chickens, 7@8c; ducks, 10c; geese, 7@8c; turkeys, 11@12c. Yesterday the market was well supplied, and the warm weather injured trade, giving a dull tone to the market.

GAME.—Market active. Per pair, partridge, 40@60c; ducks—mallard, 75@80c; canvas back, $1@1 50; red head, 75@80c; teal, 30@35c; blue bill, 30@35c. Per lb., venison—saddle, 7@9c; carcass, 5@6c. Per doz., squirrels, 75c@$1. Rabbits, 5@8c each.

DRESSED HOGS.—The offerings exceed the requirements of the trade, and packers reduced prices to $4@4 15 per cwt. dividing on 200 lbs., outside for light weights.

PROVISIONS.—Family mess pork is lower, as are hams; no other changes. Quotations are as follows:

Mess, new	10 00	@10 25
Family	10 75	@11 00
Short clear	11 00	@11 25
Lard in tierces, ℔ ℔	6	@ 6¼
Lard in kegs, ℔ ℔	6¼	@ 6¾
Pure lard, in tierces	7¼	@ 7¾
Hams, ℔ ℔	10	@ 10½
Shoulders, ℔ ℔	6	@ 6¼
Choice bacon, ℔ ℔	8½	@ 9
Extra mess beef, new per bbl	6 75	@ 7 25
Plate beef	8 00	@ 8 25
Dried beef hams	8 25	@ 8 50
Tallow, ℔ ℔		@ 3¼

HAY.—The following is a record of the sales at the Michigan Avenue scales for the week up to Friday noon, with price per ton:

Monday—16 loads: Four at $14; three at $11; two at $14 50, $13 50 and $13; one at $12 50, $10 50 and $10.

Tuesday—7 loads: Three at $12; two at $13; one at $11; one at $14 and $11 50

Wednesday—15 loads: Two at $15, $14 50, $14, $13 and $12; one at $13 50, $12 50, $11 50, $11 and $9 75

Thursday—18 loads: Seven at $13; four at $15; three at $12; two at $16; one at $15 50 and $11

Friday—23 loads: Four at $12; three at $15; two at $14, $13 50, $13, $11 50 and $9; one at $16, $12 50, $11, $10 50 and $10.

LIVE STOCK MARKETS.

King's Yards.

CATTLE.

The market opened up at these yards with 1,113 head of cattle on sale. Good grades were scarce and quite a few of them could have been placed at fair prices. The bulk of the receipts were very common and they were closed out at about former prices. Stockers were in demand and sold higher. The following were the closing

QUOTATIONS:

Fancy steers weighing 1,500 to 1,650 lbs	nominal.
Extra graded steers, weighing 1,300 to 1,450 lbs	3 90@4 00
Choice steers, fine, fat and well formed, 1,100 to 1,300 lbs	3 50@3 75
Good steers, well fatted, weighing 950 to 1,100 lbs	3 30@3 75
Good mixed butchers' stock—Fat cows, heifers and light steers	2 75@3 00
Coarse mixed butchers' stock—Light thin cows, heifers, stags and bulls	1 75@2 30
Stockers	2 00@2 40
Bulls	1 50@2 50

Carr sold Genther 4 fair butchers' steers av 1,015 lbs at $3 25.

Brooks sold Murphy 26 mixed westerns av 767 lbs at $2 25 and 28 to Marx av 610 lbs at $2.

Robb sold Fileschman a mixed lot of 5 head of coarse butchers' stock av 962 lbs at $2.

Adams sold Parks 6 fair butchers' steers av 1,018 lbs at $3 and 3 stockers to Pallister av 630 lbs at $2 25.

Starkweather sold McGee a mixed lot of 5 head of coarse butchers' stock av 950 lbs at $1 75.

Carr sold McIntire a mixed lot of 9 head of thin butchers' stock av 754 lbs at $2 30.

Webber sold Kofski 9 fair butchers' steers av 936 lbs at $3.

Wheeler sold Kamman a mixed lot of 4 head of coarse butchers stock av 630 lbs at $2.

Nichols sold Parks 5 good cows av 1,042 lbs at $2 75.

C Roe sold Fitzpatrick a mixed lot of 15 head of fair butchers' stock av 943 lbs at $2 50.

Beardsley sold J Wreford 4 fair heifers av 885 lbs at $2 80.

Allen sold Sullivan 13 stockers av 796 lbs at $2 50.

Holmes sold H Roe a mixed lot of 5 head of fair butchers' stock av 792 lbs at $2 40.

C Roe sold John Robinson 5 fair butchers' steers av 1,018 lbs at $3 and a mixed lot of 12 head of thin butchers' stock av 790 lbs at $2 30.

G D Spencer sold Fitzpatrick 5 fair cows av 1,200 lbs at $2 15 and 2 bulls to McGee av 1,170 lbs at $1 50.

Weeks sold McGee a mixed lot of 6 head of coarse butchers' stock av 8[illegible]0 lbs at $1 75.

Clark sold Kamman a mixed lot of 7 head of thin butchers' stock av 777 lbs at $2 25 and a bull weighing 800 lbs at $1 50.

Reason sold Farnam a mixed lot of 4 head of fair butchers' stock av 997 lbs at $2 50.

Holmes sold Sullivan 6 stockers av 708 lbs at $2 25.

Sprague sold Costello 5 stockers av 574 lbs at $2.

Allen sold Loosemore a mixed lot of 7 head of thin butchers' stock av 735 lbs at $2 25.

Purdy sold Loosemore a mixed lot of 10 head of fair butchers' stock av 795 lbs at $2 35.

White sold Sullivan 4 fair heifers av 790 lbs at $2 75.

Beardsley sold Price a mixed lot of 10 head of thin butchers' stock av 879 lbs at $2 35.

Holmes sold Marx a mixed lot of 6 head of fair butchers' stock av 883 lbs at $2 50.

Simmons sold John Robinson 2 fair butchers' steers av 900 lbs at $3 and 4 stockers to Pallister av 815 lbs at $2 35.

Bordine sold Loosemore a mixed lot of 4 head of good butchers' stock av 820 lbs at $2 75.

Holmes sold McGee a mixed lot of 5 head of coarse butchers' stock av 796 lbs at $2.

Pierson sold Fileschman a mixed lot of 7 head of coarse butchers' stock av 850 lbs at $1 90.

Adams sold Loosemore a mixed lot of 7 head of coarse butchers' stock av 994 lbs at $1 80.

Clark sold Sullivan 9 feeders av 857 lbs at $2 50.

Besch sold Caplis a mixed lot of 21 head of coarse butchers' stock av 722 lbs at $2.

Cowe sold Fileschman a mixed lot of 11 head of coarse butchers' stock av 838 lbs at $2 10.

Switzer & Ackley sold Caplis a mixed lot of 5 head of coarse butchers' stock av 602 lbs at $1 50.

Simmons sold Grant a mixed lot of 12 head of coarse butchers' stock av 849 lbs at $1 90.

Dennis sold Caplis a mixed lot of 15 head of coarse butchers' stock av 568 lbs at $1 75.

White sold McGee 6 thin cows av 1,016 lbs at $1 75.

Beardsley sold Loosemore a mixed lot of 6 head of thin butchers' stock av 810 lbs at $2 25 and 4 coarse cows av 802 lbs at $2.

Welch sold Grant a mixed lot of 20 head of coarse butchers' stock av 941 lbs at $2.

SHEEP.

The offerings of sheep numbered 2,781 head. The demand for sheep was active and all changed hands. The quality was not as good as that of last week, and when this is taken into consideration, the prices realized were fully as high as those of one week ago.

White sold Sullivan 93 lambs av 72 lbs at $5 25.

Nichols sold Burt Spencer 70 lambs av 66 lbs at $5 50.

Bordine sold Burt Spencer 66 av 86 lbs at $4 25; 48 lambs av 62 lbs at $5 15 and 10 culls av 75 lbs at $2 50.

Ellis sold Burt Spencer 63, part lambs, av 76 lbs at $4 50.

Fileschman sold Loosemore 60, part lambs, av 72 lbs at $3 75.

Nichols sold Burt Spencer 59, part lambs, av 67 lbs at $4 15.

Lovewell sold Burt Spencer 17 av 65 lbs at $3 20 and 33 lambs av 47 lbs at $4 50.

C Roe sold John Robinson 52 av 79 lbs at $4 25.

Sprague sold Burt Spencer 64 av 72 lbs at $3 50 and 20 culls av 73 lbs at $2 50.

Standlick sold Sullivan 29 lambs av 61 lbs at $5 25.

Lyman sold Baxter 35 lambs, av 57 lbs at $4 75.

Purdy sold Morey 103, part lambs, av 79 lbs at $4 50.

McCafferty sold Fitzpatrick 59, part lambs, av 77 lbs at $4 30.

Glenn sold Burt Spencer 126, part lambs, av 67 lbs at $4 30.

Pinkney sold Burt Spencer 27 av 80 lbs at $4 and 50 lambs av 65 lbs at $5 35.

Brougham sold Sullivan 100 lambs av 66 lbs at $5 25.

Clark sold Loosemore 101, part lambs, av 72 lbs at $4 50.

McHugh sold Sullivan 56 lambs av 52 lbs at $5 12½.

Kalaher sold Burt Spencer 86 lambs av 53 lbs at $4 75.

Robb sold Burt Spencer 104 lambs av 56 lbs at $5.

Anderson sold Morey 16 av 95 lbs at $4 75.

HOGS.

The offerings of hogs numbered 2,338 head. The hog market opened up active and continued so until the close. While prices were about 10 cents lower than those of last week, still they were too high for shippers to pay, and they kept out of the market. As we said two weeks ago the local dealers here can pay so near Buffalo prices for hogs, that there is no margin left for shippers. Some of the drovers who shipped out last week in preference to selling here at the ruling prices will bear us out in this assertion.

Standlick sold Hammond 30 av 185 lbs at $3 40.

C Roe sold Hammond 82 av 217 lbs at $3 45.

McHugh sold Hammond 47 av 242 lbs at $3 45.

Pinkney sold Steele 15 av 143 lbs at $3 40.

Nott sold Hammond 25 av 212 lbs at $3 40.

McCafferty sold Hammond 66 av 210 lbs at $3 40.

Wheeler sold Steele 42 av 159 lbs at $3 40.

Proper sold Sullivan 38 av 155 lbs at $3 30.

Purdy sold Steele 71 av 198 lbs at $3 45.

Hogan sold Campbell 25 av 205 lbs at $3 50.

Webber sold Hammond 39 av 190 lbs at $3 42½.

Kalaher sold Steele 24 av 198 lbs at $3 40.

Page sold Steele 31 av 163 lbs at $3 45.

Holmes sold Campbell 12 av 206 lbs at $3 50.

White sold Hammond 37 av 234 lbs at $3 40.

Beardsley sold Steele 53 av 186 lbs at $3 45.

Parks sold Steele 13 av 220 lbs at $3 45.

Watson sold R S Webb 84 av 172 lbs at $3 45.

Holmes sold Steele 30 av 155 lbs at $3 40.

Astley sold Steele 87 av 167 lbs at $3 40.

Purdy sold Steele 21 av 181 lbs at $3 45.

Bordine sold Steele 55 av 168 lbs at $3 50.

Dennis sold R S Webb 42 av 181 lbs at $3 45.

Cowe sold Hammond 43 av 190 lbs at $3 42½.

McMullen sold Hammond 90 av 220 lbs at $3 40.

Cushman sold Steele 57 av 200 lbs at $3 50.

Watson sold R S Webb 84 av 172 lbs at $3 40.

Belhimer sold Hammond 57 av 206 lbs at $3 40.

At the Michigan Central Yards.

CATTLE.

There was a fair supply of cattle at these yards, the bulk being westerns. The demand was fairly active and the receipts were closed out at full last week's prices, with stockers ranging higher.

Wreford & Beck sold Phillips 59 mixed westerns av 985 lbs at $3 and 23 av 1,000 lbs at $2 55.

Taylor sold John Robinson a mixed lot of 9 head of fair butchers' stock av 887 lbs at $2 40 and 3 thin heifers av 540 lbs at $2.

Lewis sold Sullivan 2 feeders av 830 lbs at $2 50 and 3 bulls av 1,150 lbs at $2.

Wreford & Beck sold Stonehouse 27 fair western steers av 1,067 lbs at $3 25.

C Roe sold John Robinson a mixed lot of 10 head of fair butchers' stock av 1,110 lbs at $2 25 and 2 bulls av 925 lbs at $1 50.

Jedele sold Wreford & Beck a choice cow weighing 1,560 lbs at $3 75.

Judson sold Wreford & Beck a choice cow weighing 1,470 lbs at $3 50.

Stevens sold Sullivan 5 stockers av 730 lbs at $2 35 and a mixed lot of 5 head of thin butchers' stock to John Robinson av 770 lbs at $2 25.

M Quillan sold Sullivan 23 stockers av 732 lbs at $2 30 and a mixed lot of 11 head of thin butchers' stock to John Robinson av 725 lbs at $2 20.

Judson sold Sullivan 15 stockers av 730 lbs at $2 35.

Wreford & Beck sold Cross 29 mixed westerns av 860 lbs at $2 30 and 31 to Mason av 896 lbs at $2 25.

SHEEP.

The offerings of sheep were light, the demand active with prices 25 cents higher than those of last week.

Jedele sold Burt Spencer 59 av 94 lbs at $4 65.

O'Hara sold Burt Spencer 40 lambs av 67 lbs at $5 60.

C Roe sold Burt Spencer 51, part lambs, av 90 lbs at $5 25.

Merritt sold Monahan 29 av 83 lbs at $4 35 and 15 lambs to Burt Spencer av 93 lbs at $5 25.

Stevens sold Fitzpatrick 96, part lambs, av 73 lbs at $4 25.

Shanahan sold Sullivan 102 lambs av 67 lbs at $5 25.

Sullivan sold Monahan 22 av 89 lbs at $4 50.

HOGS.

The offerings of hogs were light, the demand fairly active with prices about 10 cents lower than those of one week ago.

C Roe sold Burt Spencer 65 av 2[illegible]3 lbs at $3 50.

Taylor sold Hammond 44 av 171 lbs at $3 25.

Derendinger sold Steele 40 av 199 lbs at $3 45.

Lewis sold Steele 49 av 171 lbs at $3 40.

Stevens sold Steele 34 av 197 lbs at $3 45.

McQuillan sold Steele 19 av 193 lbs at $3 47½.

C Roe sold Steele 49 av 202 lbs at $3 40.

O Hara sold Hammond 61 av 202 lbs at $3 40.

Chicago.

CATTLE.—Receipts 66,609, against 69,929 last week. Shipments 23,382 head. The receipts of cattle on Monday numbered 17,965 head. The market opened up with a good demand, but the receipts were excessive, and while choice to fancy steers sold at former prices, other grades were 5@10 cents lower. Nine Hereford steers av 1,348 lbs sold at $6; 25 head of 1,780 lb steers sold at $5 75; 29 steers av 1,880 lbs at $5 50; 15 steers av 1,868 lbs at $5 40, and 16 steers av 1,579 lbs at $5 50, all for the holiday trade. Only three or four other lots sold above $4 80. Some 1,440@1,577 lb steers sold at $5 10. Common natives av nearly 1,200 lbs sold at $2 70 and most of the desirable 1,200@1,500 lb steers sold at $3 20@3 90. Some 1,116 lb steers sold at $3 75 and 1,340 lbs steers as high as $4 50. Texas cattle about 5@10c lower, with sales at $1 35@2 05 for bulls and cows and $2 50@2 60 for steers. Native butcher stock about 5@10c lower. Most of the cows sold at $1 80@2 25; bulls sold largely at $1 75@2 30. The market was weak on Tuesday and Wednesday and on Thursday there was a slight decline. On Friday the market was quiet and weak, closing at the following

QUOTATIONS:

Good to choice steers, 1,500 to 1,700 lbs	4 90@5 25
Fair to good 1,150 to 1,450 lbs	3 25@[illegible] 70
Poor to fair, 900 to 1,250	2 65@4 05
Fancy native cows and heifers	2 45@2 65
Common to choice cows, 850 to 1,000 lbs.	1 00@2 30
Poor to best bulls, 900 to 1,800 lbs	1 25@3 [illegible]5
Stockers and Feeders	1 75@2 85
Texas bulls and cows	1 3[illegible]@2 20
Texas steers	2 00@2 70

HOGS.—Receipts 173,908, against 150,939 last week. Shipments 19 489 The receipts of hogs on Monday numbered [illegible]3,1[illegible]3 head. The demand for hogs was fairly active, but prices averaged 5 cents lower than on Saturday. Heavy sold at $3 50@3 80; mixed, $3 55@3 80 and light at $3 50@3 75. Prices were 5 cents lower on Tuesday. The market ruled steady on Wednesday, but declined 5@10 cents on Thursday, closing weak. On Friday the market was active at a decline of 5 cents: light sold at $3 3[illegible]@3 55; rough mixed, $3 35@3 40; heavy, $3 45@3 6[illegible].

Buffalo.

CATTLE.—Receipts 14,411, against 12,769 the previous week. The market opened up on Monday with 250 car loads of cattle on sale. For the best grades prices were steady, but for others prices were 15 cents lower than the previous week. A few fancy Christmas steers brought $5@5 20; good to extra fancy exports, $4 40@4 75, while the bulk of the sales of good 1,150 to 1,400 lbs generally ranged at $3 50@4 10; light butchers' steers of 950 to 1,050 lbs, $3@3 40. Cows and heifers slow at $2 25@2 75, extra $3. Bulls slow at $2 25@2 40; sausage lots very dull at $1 75@2. Up to Thursday night the fresh receipts were very light and business was mostly confined to stock left over from Monday, which was finally cleared off at about the opening rates. On Friday the market ruled quiet and closed at the following

QUOTATIONS:

Extra Beeves—Graded steers, weighing 1,500 to 1,600 lbs	$4 35@4 75
Choice Beeves—Fine, fat, well-formed steers, weighing 1,400 to 1,500 lbs	4 10@4 25
Good beeves—Well-fattened steers weighing 1,300 to 1,400	3 85@4 00
Medium Grades—Steers in fine flesh, weighing 1,100 to 1,200 lbs	3 55@3 75
Light Butchers'—Steers averaging 1000 to 1,100 lbs, of fair to good quality	3 00@3 40
Butchers' Stock—Inferior to common steers and heifers, for city slaughter, weighing 900 to 1,000 lbs.	1 75@2 50
Michigan stock cattle, common to choice	2 40@2 75
Michigan feeders, fair to choice	2 90@3 25
Fat bulls fair to extra	2 20@3 [illegible]5

SHEEP.—Receipts 26,200, against 25,000 the previous week. There were 60 loads of sheep on sale Monday. The market ruled slow with 15@20 cents lower, and good sheep about steady. Sheep of 80 to 90 lbs sold at $4 50@4 90; 90 to 110 lbs, $5@5 50; 110 to 120 lbs, $5 60@5 75; 48 to 80 lambs, $4 75@6 60. The market was steady for the balance of the week and closed on Friday at strong Monday's rates.

HOGS.—Receipts 74,430, against 78,820 the previous week. There were 2[illegible]0 car loads of on sale Monday. The demand was slow and prices a shade lower than on Saturday. Yorkers sold at $3 60@3 65; mixed, $3 65@3 70; medium and heavy, $3 6[illegible]@3 70. Prices were 5 cents lower on Tuesday, ruled steady on Wednesday but declined 5 cents on Thursday. The market was better on Friday and prices advanced 15 cents. At the close Yorkers were quoted at $3 65@3 70; mixed, heavy and medium weights at $3 72½@3 75.